Pacific School of
Religion
Berkeley, Calif.

PROCEEDINGS OF THE
SIXTH INTERNATIONAL CONGRESS
OF PHILOSOPHY

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THE Organizing Committee of the Sixth International Congress of Philosophy desire to express their grateful indebtedness for generous contributions to the treasury of the Congress made by American Foundations, Divisions of the American Philosophical Association, and numerous private persons, including the Sustaining members of the Congress. Without this assistance the Congress could not have attained the wide international character which was so large a feature of its success.

NICHOLAS MURRAY BUTLER
Chairman, Organizing Committee

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DOCUMENTS RELATING TO THE ORGANIZATION OF THE CONGRESS

1. ANNOUNCEMENT OF THE ENGLISH ORGANIZING COMMITTEE

December, 1914

To Members of the Fifth International Congress of Philosophy

THE war in Europe has made it impossible to carry through the arrangements for the Fifth International Congress of Philosophy, which was to have been held in London in September, 1915. Before July of the present year (1914) the arrangements for the meeting had, to a great extent, been completed. The leading Universities of many nations had appointed delegates, and a very large number of distinguished Continental and American scholars were preparing to take part in the proceedings.

In announcing the necessary abandonment of the arrangements for the Congress of 1915, we, Members of the General Organising Committee, desire to express an earnest hope that the confederacy of the entire philosophical world, which has subsisted since the inauguration of the series of Congresses in 1900, and seemed to have attained the rank of a permanent institution, will not be set aside for a longer time than outward circumstances render absolutely imperative. We are confident that the common interest in philosophy which has expressed itself so effectively in the past meetings of the Congress will prove to be an enduring bond.

We are returning the subscriptions of Members as the Congress cannot be held at the time appointed. But we pledge ourselves, as soon as possible after peace is restored, to promote with all our power the continuance of this international bond, either by renewing the invitation to meet in this country or by obtaining an invitation from a neutral country.

HALDANE, *Honorary President* (*Lord High Chancellor*), *F.R.S.*, *F.B.A.*
BERNARD BOSANQUET, *President, D.C.L., LL.D., F.B.A.*
H. WILDON CARR, *Honorary Secretary, D.Litt.*
F. C. S. SCHILLER, *Honorary Treasurer* (*University of Oxford*), *D.Sc.*

(Signed further by seventy-three Members of the General Organising Committee.)

December, 1914

2. Questionnaire sent to the Members of the Permanent International Committee and the Members of the English Organizing Committee

FIFTH INTERNATIONAL CONGRESS OF PHILOSOPHY

To the Members of the International Committee and to the Members of the English Committee

THE desire has been expressed in many quarters to resume the regular series of International Congresses of Philosophy which was interrupted by the great war. The first Congress was held in Paris in 1900; the second in Geneva in 1904; the third in Heidelberg in 1908; and the fourth in Bologna in 1911. At Bologna it was arranged that the fifth should be held in London in 1915, Dr. Bernard Bosanquet was appointed acting President and I was appointed honorary organising Secretary. The Committee for this Congress had been appointed and had held several meetings, the first circular had been issued, and many adhesions and subscriptions had been received, when it became necessary by reason of the war to announce the abandonment of the meeting and the return of subscriptions.

The conditions of Europe since the war ended, the economic and financial disturbances, the political unrest, and the barrier at the frontiers, make it impossible to revive the organisation for the 1915 meeting in its original intention. Dr. Bosanquet died in February 1923 and the organisation would involve a new invitation, new appointments, and entirely new arrangements.

An International Congress of Philosophy is being held in Naples in May of this year in connexion with the celebration of the Seventh Centenary of the foundation of the University of Naples. This Congress is being named the fifth International Congress of Philosophy and in consequence the postponed Congress will, when held, be named the sixth.

I have received a proposal from Professor A. C. Armstrong, President[1] of the American Philosophical Association, to take over the arrangements for this Congress and to hold it in America in one of the principal universities in 1925 or 1926. The advantages of accepting this offer appear to me obvious and irreproachable. The invitation will come from a country outside the complications of the impoverished European nations and from a people who can offer generous assistance to the delegates without offending any national susceptibilities.

---

[1] *Erratum* for Chairman, Committee on International Coöperation.

I propose therefore with your consent to hand over to Professor A. C. Armstrong the authority to convene the Sixth International Congress of Philosophy which you honoured me by conferring upon me at Bologna. If it has your approval will you kindly sign and return to me the enclosed form which I will forward to America.

I am
Yours faithfully,
H. Wildon Carr
Honorary Secretary
April, 1924 *Fifth International Congress of Philosophy*

(*The following form was enclosed with the letter*)

FIFTH INTERNATIONAL CONGRESS OF PHILOSOPHY

To Professor H. Wildon Carr,
107 Church St., Chelsea,
London, S.W.3.

Dear Sir,

I approve the proposal to confer on Professor A. C. Armstrong, President of the American Philosophical Association, the authority to convene the Sixth International Congress of Philosophy.

Name______________________________

Address______________________________

Member of International / English Committee

3. Preliminary Notice to Journals and Reviews

SIXTH INTERNATIONAL CONGRESS OF PHILOSOPHY

THE American Philosophical Association, through the courtesy of Professor H. Wildon Carr, Honorary Secretary of the Fifth International Congress, appointed for London in 1915, but interrupted by the war, has been authorized by the Permanent International Committee, as constituted at the Congress of Bologna, 1911, and by the English Organizing Committee of 1915, to convene the next International Congress in the United States. The American Association has also received assurances of cordial support from philosophical scholars in England, France, Germany, and Italy. It, therefore, announces its decision to invite the philosophers of all nations to meet with it in the United States in the second week of September, 1926. The place of meeting — to be more definitely announced later — will be at one of the Eastern Universities, not far from New York. English, French, German, Italian, and Spanish will be recognized as the official languages of the Congress.

In a few months the American Association intends to issue a fuller announcement of the plan of the Congress and more formal invitations to its sister associations, other learned bodies, and our colleagues throughout the world. Meanwhile, inquiries and correspondence may be addressed to the Corresponding Secretary, Professor John J. Coss, Columbia University, New York, U.S.A.

For the Organizing Committee,
Nicholas Murray Butler, *Chairman*
A. C. Armstrong, *Honorary Secretary*

New York, August, 1924

4. First Circular

SIXTH INTERNATIONAL CONGRESS OF PHILOSOPHY

IN accordance with the Preliminary Announcement of August, 1924, the Sixth International Congress of Philosophy will meet September, 1926, in the United States, under the auspices of the American Philosophical Association.

The date of the Congress will be September 13–17, 1926.

The place will be Harvard University, Cambridge, Massachusetts, U.S.A. The President of Harvard and the Department of Philosophy extend to the Congress a hearty welcome. In particular, they are making convenient arrangements for the entertainment of Delegates and Members. Rooms will be provided for official Delegates free of charge. Meals for Delegates, rooms and meals for Members, will be furnished at minimum rates.

The recognized languages will be English, French, German, Italian, and Spanish.

The sessions of the Congress will be arranged under four divisions: A. Metaphysics (including the philosophy of nature, philosophy of mind, and philosophy of religion); B. Theory of Knowledge, Logic, and Scientific Method; C. Theory of Values (including ethics, social philosophy, philosophy of the state, philosophy of law, philosophy of education, and aesthetics); D. History of Philosophy. Under each of these divisions one General Session will be held with papers by specially invited speakers, whose names and subjects will be announced later. Sectional Meetings, in part on subjects determined in advance, will also be held under each division. The time allotted for sectional papers will be limited to twenty minutes each. Members offering papers are requested to forward, with the titles of their papers, brief type-written summaries for submission to the Committee on the Program. They are further requested to note that, to the regret of the Committee, it will be impossible to accept papers unless they are to be presented by their authors in person.

Membership in the Congress will include Active Members and Associate Members. Active Members will be entitled to all the privileges of the Congress, including a copy of the *Proceedings*. The fee for Active Members will be five dollars ($5.00). The fee for Associate Members (families of Active Members and other qualified persons) will be two dollars and a half ($2.50); but they will not be entitled to vote, to special privileges of entertainment, nor to the *Proceedings*.

Adhesions, Membership fees, and Papers for the Sectional Sessions may be sent to *Professor John J. Coss, Corresponding Secretary, 531 West 116th Street, New York City.*

Later circulars will contain the detailed plans for the Congress as they are developed and matured. Meanwhile, we commend it to the interest of our Colleagues in all lands; as, in behalf of the American Philosophical Association, we have the honor to invite them to join in continuing the series of International Congresses, inaugurated at Paris in 1900 for the advancement of philosophy and the promotion of intercourse among philosophical scholars.

(*Signed*)

For the Organizing Committee,

NICHOLAS MURRAY BUTLER, *Chairman*
A. C. ARMSTRONG, *Honorary Secretary*

5. Second Circular

SIXTH INTERNATIONAL CONGRESS OF PHILOSOPHY

AS announced in the First Circular (August, 1925) the Sixth International Congress of Philosophy will meet September 13–17, 1926, at Harvard University, Cambridge, Massachusetts, U.S.A.

The Program of the Congress will be as follows:

A. GENERAL PLAN.

Monday Evening, September 13, Opening Meeting. Brief Addresses of Welcome. Reply by a Representative of the Foreign Delegates. Presentation of Foreign Delegates. Informal Smoker.

Tuesday, *Wednesday*, *Thursday*, and *Friday*, September 14–17:

Mornings, 9:30–12:30: Simultaneous Section Meetings in all Four Divisions.

Tuesday Afternoon	Excursion
Tuesday Evening	General Session, Division A
Wednesday Afternoon	General Session, Division D
Wednesday Evening	No Session
Thursday Afternoon	Business Meeting
Thursday Evening	General Session, Division C
Friday Afternoon	General Session, Division B
Friday Evening	Official Dinner or Reception

B. SESSIONS.

Division A. METAPHYSICS (Philosophy of Nature, Philosophy of Mind, Philosophy of Religion).

I. General Session:

The Hypothesis of Emergent Evolution, its Meaning and the Present State of the Argument concerning it.

II. Sections:

1. Physics and Metaphysics, with Special Reference to the Problem of Time.
2. Philosophy of Religion, with Special Reference to Mysticism in East and West.

3. Philosophy of Mind, with Special Reference to the Nature of the Community between Minds.
4. Open Session. Suggested Topics: Relation of Biology and Metaphysics, Realism and Idealism, Value and Existence, the Concept of Personality.

Division B. LOGIC, EPISTEMOLOGY AND PHILOSOPHY OF SCIENCE.

I. General Session:

Continuity and Discontinuity among the Sciences.

II. Sections:

1. The Status and Relations of Sensa and Scientific Objects.
2. The Doctrine of Subsistence and Essence in Current Logic and Epistemology.
3. The Bearing of the Distinction of Judgments of Value and Judgments of Existence upon Logic and Epistemology.
4. Open Session. Suggested Topics: Synthetic Judgments a priori. Memory, its Significance for Epistemology. Logic of Probability and Theory of Induction.

Division C. THEORY OF VALUES (Ethics, Social Philosophy, Aesthetics).

I. General Session:

Philosophy and International Relations.

II. Sections:

1. The Basis of Objective Judgments in Ethics.
2. Aesthetics.
3. The Philosophy of Law.
4. Open Session. Suggested Topics: Philosophy of History, Political Philosophy, Philosophy of Education.

Division D. HISTORY OF PHILOSOPHY.

I. General Session:

The Rôle of Philosophy in the History of Civilization.

II. Sections:

1. Ancient Philosophy. The Socratic and Platonic Elements in the Doctrines of Plato's Dialogues.
2. Mediaeval Philosophy. Scholastic, Arabic, and Jewish Phi-

losophy, with Special Reference to the Problem of Creation.

3. Modern Philosophy. Neo-Scholasticism — a Discussion of the Value of Scholastic Philosophy in Terms of the Present. Kant. Latest Researches in Spinoza. Pascal or Descartes.
4. Contemporary Philosophy. Reports on Contemporary Tendencies.

The speakers at the General Sessions will include the following:

Division A. H. Driesch (Leipzig), A. O. Lovejoy (Baltimore)
Division B. F. Enriques (Rome), W. E. Hocking (Cambridge, Mass.)
Division C. J. Dewey (New York), G. Gentile (Rome), R. Pound (Cambridge, Mass.)
Division D. É. Gilson (Paris), Henry Osborn Taylor (New York)

A complete list of Foreign Scholars who will be present at the Congress cannot be given at this early date. The following, however, have already signified their intention to attend the Congress as Delegates or Speakers:

J. Burnet, H. Wildon Carr, A. E. Heath, G. Dawes Hicks, J. Laird, Miss H. D. Oakeley, W. D. Ross, F. C. S. Schiller, J. A. Smith, H. Sturt (*Great Britain*); C. Bouglé, É. Gilson, P. Lapie, L. Lévy-Bruhl (*France*); B. Bauch, E. Becher, H. Driesch, M. Geiger, J. Goldstein, A. Liebert, O. Spengler (*Germany*); A. Aliotta, G. Del Vecchio, F. Enriques, G. Gentile, G. Tauro (*Italy*); G. S. Brett, R. C. Lodge (*Canada*); Tj. de Boer (*Amsterdam*); W. Lutoslawski (*Vilna*); L. Noël (*Louvain*); Ortega y Gasset (*Madrid*); S. Dasgupta, S. Radhakrishnan (*India*); A. Vassilieff (*Moscow*); H. Weyl (*Zurich*); R. F. A. Hoernlé (*Johannesburg, South Africa*).

In each Division the first three Sections will include papers by designated speakers and, so far as time permits, papers offered by other members of the Congress. In Divisions A, B, and C, the Fourth Section is entirely open. (In Division D, the Fourth Section is reserved for the discussion of present movements in the various nations.) Sectional papers will be limited to twenty minutes and they must be presented by their authors in person. Members offering papers should, by June 1, forward their titles and brief type-written summaries to the Chairman of the Program Committee, *Professor Ralph Barton Perry, 447 Widener Library, Cambridge, Massachusetts,* *U.S.A.*, who will also answer all inquiries concerning the Program. Summaries (not to exceed 300 words) will be mimeographed and circulated, in advance of the Congress, among speakers at the same session; the papers being read in full at the Congress, in the form in which they are afterward to be published in the *Proceedings*. Before the close of the Congress, all speakers should deposit their manuscripts at the Bureau. These manuscripts must not exceed 2000 words, except in the case of papers read by invitation at the General Sessions, which may contain 3000 words.

Prospective Members of the Congress are requested as soon as possible to send their applications for enrollment, together with their membership fees (for Active Members, five dollars; Associate Members — including Graduate Students — two dollars and a half) to the Corresponding Secretary, *Professor John J. Coss, Columbia University, New York City*, who will send them registration cards and record their names on the roll of the Congress.

Convenient arrangements for the entertainment of Delegates and Members will be made by the authorities of Harvard University. Rooms will be provided for those desiring them in Smith Hall and Standish Hall (reserved for ladies). (Special arrangements will be made, upon application, for a limited number of married couples.) The charges will be as follows: For Members, for five days, twenty-two dollars ($22.00), for four days or less, twenty dollars ($20.00), — meals and rooms included; for Official Foreign Delegates, for five days, fifteen dollars ($15.00), for four days or less, thirteen dollars ($13.00), — no charge being made for rooms. The number of single suites is limited. Members who would enjoy occupying the same suite are asked to arrange to room together and to notify the Entertainment Committee. If the demand for rooms should exceed the available accommodations, preference will be given to Official Foreign Delegates and Active Members. Delegates and Members desiring accommodations should make application as soon as possible to the Chairman of the Entertainment Committee, *Professor James H. Woods, Harvard University, Cambridge, Massachusetts, U.S.A.*, who will also answer any inquiries.

Foreign Delegates disembarking in New York are requested to notify Professor John J. Coss; those disembarking in Boston are requested to notify Professor James H. Woods. It is hoped that reduced railway rates will be secured within the United States.

The Sessions of the Congress will ordinarily be held in the same group of buildings in which the Delegates and Members are housed. The Bureau will be located in Smith Hall, and will be open from

Saturday A.M., September 11, 1926. Members of the Congress should register at the Bureau as soon as possible after their arrival in Cambridge. Letters or telegrams for members may also be addressed to the Bureau for the duration of the Congress.

For the Organizing Committee,

Nicholas Murray Butler, *Chairman*
A. C. Armstrong, *Honorary Secretary*

April, 1926

6. Invitations

THE following invitation, with the Second Circular, was sent to philosophical scholars throughout the world. The members of the Permanent International Committee received special invitations to attend the Congress and to participate in its work. Sister Associations and other Learned Societies were further invited, in particular the American Psychological Association, with which the American Philosophical Association had at one time been affiliated.

IN BEHALF OF THE AMERICAN PHILOSOPHICAL ASSOCIATION we have the honor to invite you to participate in the Sixth International Congress of Philosophy to be held in the United States of America, at Harvard University, Cambridge, Massachusetts, September thirteenth to seventeenth, nineteen hundred twenty-six.

A statement of the arrangements for the Congress is enclosed.

For the Organizing Committee,

Nicholas Murray Butler, *Chairman*
A. C. Armstrong, *Honorary Secretary*

New York, April
Nineteen hundred twenty-six

ORGANIZATION OF THE CONGRESS

1. The Permanent International Committee as Constituted at the Fourth Congress, Bologna, 1911

C. B. Aars (Christiania)†, B. Alexander (Buda-Pesth), J. M. Baldwin (New York), A. J. Balfour (London), P. Barth (Leipsic)†, H. Bergson (Paris), B. Bosanquet (London)†, É. Boutroux (Paris)†, M. Calderoni (Florence)†, M. Cantor (Heidelberg)†, H. W. Carr (London), P. Carus (Chicago)†, E. Claparède (Geneva), L. Couturat (Paris)†, J. E. Creighton (Ithaca)†, B. Croce (Naples), A. Darlu (Paris)† , Tj. de Boer (Amsterdam), W. Dilthey (Berlin)†, H. Driesch (Leipsic), F. Drtina (Prague)†, É. Durkheim (Paris)†, G. Dwelshauvers (Paris), T. Elsenhans (Dresden)†, F. Enriques (Rome), G. S. Fullerton (New York)†, K. R. Geijer (Upsala)†, J. A. Gheorgow (Sofia), J.-J. Gourd (Geneva)†, R. B. Haldane (London), G. Heymans (Groningen), F. Hillebrand (Innsbruck), H. Höffding (Copenhagen), W. N. Ivanovski (Minsk), F. Jodl (Vienna)†, M. v. Kàrmaǹ (Buda-Pesth)†, H. Keyserling (Darmstadt), W. Kozlowski (Posen), O. Kuelpe (Munich)†, G. T. Ladd (New Haven)†, A. Lasson (Berlin)†, X. Léon (Paris), P. E. Leuckfeld (Simferopol), W. Lutoslawski (Vilna), C. W. Macfarlane (Philadelphia), P. Mansion (Ghent)†, G. Mittag-Leffler (Stockholm), H. Muensterberg (Cambridge, U.S.A.)†, G. Peano (Turin), G. Remacle (Hasselt, Belgium), A. Riehl (Berlin)†, J. Royce (Cambridge, U.S.A.)†, B. Russell (London), F. C. S. Schiller (Oxford), J. G. Schurman (Ithaca), G. D. Scraba (Bucharest), V. S. Serebrenikov (Leningrad), L. Stein (Berlin), G. F. Stout (St. Andrews), M. Straszewski (Cracow)†, C. A. Strong (New York), G. Tschelpanov (Moscow), H. Vaihinger (Halle), A. V. Vassilieff (Moscow), G. Vidari (Turin), W. Windelband (Heidelberg)†.

2. National Advisory Committees

Great Britain: S. Alexander, A. D. Lindsay, G. E. Moore, A. H. Hannay.

France: H. Bergson, Xavier Léon, L. Lévy-Bruhl.

Germany: E. Spranger, Bruno Bauch, E. Becher.

Italy: B. Croce, A. Aliotta, F. Enriques, G. Tauro.

† Deceased.

3. COMMITTEES AND OFFICERS OF THE CONGRESS

a ORGANIZING COMMITTEE

George P. Adams (California), Felix Adler (Ethical Culture Society), H. A. Aikins (Western Reserve), Ernest Albee (Cornell), H. B. Alexander (Nebraska), E. S. Ames (Chicago), A. C. Armstrong (Wesleyan), C. E. Ayres (Reed), C. M. Bakewell (Yale), J. M. Baldwin (New York City), B. H. Bode (Ohio State), J. E. Boodin (Carleton), A. A. Bowman (Princeton), H. C. Brown (Leland Stanford), W. A. Brown (Union Theological Seminary), W. L. Bryan (Indiana), G. C. Bussey (Goucher), N. M. Butler (Columbia), M. W. Calkins (Wellesley), Ivy Campbell (Wells), M. R. Cohen (College of the City of New York), John J. Coss (Columbia), E. B. Crooks (Delaware), G. W. Cunningham (Texas), A. H. Daniels (Illinois), John Dewey (Columbia), Durant Drake (Vassar), G. M. Duncan (Yale), James H. Dunham (Temple), W. G. Everett (Brown), B. C. Ewer (Pomona), W. Fite (Princeton), H. N. Gardiner (Smith), W. A. Hammond (Cornell), E. N. Henderson (Adelphi), J. G. Hibben (Princeton), W. E. Hocking (Harvard), E. H. Hollands (Kansas), J. H. Holmes (Swarthmore), H. H. Horne (New York University), R. M. Jones (Haverford), T. de Laguna (Bryn Mawr), Albert Lefevre (Virginia), J. A. Leighton (Ohio State), C. I. Lewis (Harvard), A. H. Lloyd (Michigan), R. C. Lodge (Manitoba), A. O. Lovejoy (Johns Hopkins), E. W. Lyman (Union Theological Seminary), M. T. McClure (Illinois), A. C. McGiffert (Union Theological Seminary), E. B. McGilvary (Wisconsin), D. C. Macintosh (Yale), Henry R. Marshall (New York City), W. T. Marvin (Rutgers), M. P. Mason (Bowdoin), G. H. Mead (Chicago), Alexander Meiklejohn (Wisconsin), S. H. Mezes (College of the City of New York), D. S. Miller (General Theological Seminary), W. P. Montague (Columbia), A. W. Moore (Chicago), E. C. Moore (Harvard), G. F. Moore (Harvard), W. R. Newbold (Pennsylvania)†, W. J. Newlin (Amherst), M. C. Otto (Wisconsin), E. A. Pace (Catholic University of America), Helen H. Parkhurst (Barnard), G. W. Peckham (Tulane)†, Ralph Barton Perry (Harvard), J. B. Pratt (Williams), I. W. Riley (Vassar), Reginald C. Robbins (Hamilton, Massachusetts), A. K. Rogers (New Haven), W. M. Salter (Silver Lake, New Hampshire), William Savery (Washington), E. L. Schaub (Northwestern), J. G. Schurman (American Legation, Peking), C. G. Shaw (New York University), Edna A. Shearer (Smith), W. H. Sheldon (Yale), E. A. Singer, Jr. (Pennsylvania), E. G. Spaulding (Princeton), C. A. Strong (Paris, France). H. W. Stuart (Stanford), C. F. Taeusch (Iowa), E. B. Talbot (Mount Holyoke), G. A. Tawney (Cincinnati), Frank Thilly (Cornell), Harvey G. Townsend (Smith), R. A. Tsanoff (Rice Institute), J. H. Tufts (Chicago), W. M. Urban (Dartmouth), W. M. Warren (Boston University), R. M. Wenley (Michigan), N. Wilde (Minnesota), H. H. Williams (North Carolina), F. J. E. Woodbridge (Columbia), J. H. Woods (Harvard).

b EXECUTIVE COMMITTEE

G. P. Adams (California), A. C. Armstrong (Wesleyan): Honorary Secretary, C. M. Bakewell (Yale), N. M. Butler (Columbia): Chairman, M. W. Calkins (Wellesley), M. R. Cohen (College of the City of New York), John J. Coss (Columbia): Corresponding Secretary and Treasurer, W. E. Hocking (Harvard), Albert Lefevre (Virginia), A. O. Lovejoy (Johns Hopkins), Alexander Meiklejohn (Wisconsin), W. P. Montague (Columbia): Vice-Chairman, Ralph Barton Perry (Harvard), E. A. Singer, Jr. (Pennsylvania), E. G. Spaulding (Princeton), Frank Thilly (Cornell), J. H. Tufts (Chicago), F. J. E. Woodbridge (Columbia), J. H. Woods (Harvard).

c PROGRAM COMMITTEE

Ralph Barton Perry (Harvard): Chairman, Raphael Demos (Harvard): Secretary.

d ENTERTAINMENT COMMITTEE

J. H. Woods (Harvard): Chairman.

4. LIST OF ACTIVE MEMBERS OF THE CONGRESS

ADAMS, GEORGE P., *Professor of Philosophy*, The University of California, Berkeley, California.

* ADLER, FELIX, *Professor of Philosophy*, *Senior Leader of the Ethical Culture Society*, *New York City*, Columbia University, New York City, New York.

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AYNI BEY, MEHMED ALI, *Professor of the History of Mystical Mussulmanic Sufism*, The University of Constantinople, Constantinople, Turkey.

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* Sustaining Members. † Deceased. ‡ Not in attendance.

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Kennedy, F. M., 31 Emmons Street, Milford, Massachusetts.
Kerth, Elizabeth, Portland, Maine.
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Kitay, Sarah, 276 Broadway, Paterson, New Jersey.
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Krusé, Katherine B. (Mrs. Cornelius F.), Wesleyan University, Middletown, Connecticut.
Kucera, Jan, Salvasovslta, Prague, Czechoslovakia.

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Lamont, Corliss, 107 East 70th Street, New York City, New York.
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Laud, Thornton C., 92 Highland Avenue, Yonkers, New York.
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Long, Hilton W., 336 Payson Street, Brookline, Massachusetts.
Lowe, Emma Shaw, Taunton State Hospital, Taunton, Massachusetts.

MacCallum, Reid, Queen's University, Kingston, Ontario, Canada.
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Marshall, Dr. John S., *Instructor in Philosophy*, Syracuse University, Syracuse, New York.

Martin, Mrs. S. Guy, Care of Professor S. Guy Martin, Northwestern University, Evanston, Illinois.

Merrill, Margery, *Assistant Psychologist*, Taunton State Hospital, Taunton, Massachusetts.

Miller, Hugh, *Graduate Student of Philosophy*, Cambridge, Massachusetts.

Miller, James Albert, *Graduate Student of Philosophy*, Harvard University, Cambridge, Massachusetts.

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RICCIO, LOUISE E., *Graduate Student*, 510 West 123rd Street, New York City, New York.
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Romao, Joao Antonis de M., The University of Lisbon, Lisbon, Portugal.

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Rothwell, Mrs. Bernard J., Boston, Massachusetts.

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Scudder, Delton L., 550 Tolland Street, Burnside, Connecticut.

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Shafer, Mrs. Lucile, Wade Park Manor, Cleveland, Ohio.

Singer, Herbert, Hartley Hall, Columbia University, New York City, New York.

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Smith, Nelson H., *Graduate Student of Philosophy*, 36 Gray Street, Cambridge, Massachusetts.

Smith, Mrs. Nelson H., 36 Gray Street, Cambridge, Massachusetts.

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Stave, E. G.
Stephens, I. K., *Professor of Philosophy*, Southern Methodist University, Dallas, Texas.
Stettheimer, Ettie, West End, New Jersey.
Stoll, Marion R., Bryn Mawr, Pennsylvania.
Stuart, Mrs. H. W., Care of Professor H. W. Stuart, Leland Stanford University, Stanford University, California.
Sun, H. C., *Graduate Student of Economics*, 44 Sacramento Street, Cambridge, Massachusetts.
Swenson, Esther L., *Graduate Student of English*, Y.W.C.A., Cambridge, Massachusetts.
Swift, Walter B., M.D., 110 Bay State Road, Boston, Massachusetts.

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Taylor, Overton H., *Instructor in Economics*, Harvard University, Cambridge, Massachusetts.
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Thomas, William B., 515 Beacon Street, Boston, Massachusetts.
Tilley, Ethel, *Graduate Student of Philosophy*, Suite 2, 163 Huntington Avenue, Boston, Massachusetts.
Townsend, Ada M. (Mrs. H. G.), The University of Washington, Seattle, Washington.
Trent.
Tyler, H. W., *Professor of Mathematics*, The Massachusetts Institute of Technology, Cambridge, Massachusetts.

Upton, Olive G., Box 57, Station A, Boston, Massachusetts.

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Wayne, Guy H., *Graduate Student*, 46 Clarendon Avenue, West Somerville, Massachusetts.
Weber, Mrs. Florence G., 67 Mount Vernon Street, Boston, Massachusetts.
Weill, Blanche C., *Graduate Student of Education*, 9 Chauncy Street, Cambridge, Massachusetts.
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Whitehead, Evelyn (Mrs. A. N.), Care of Professor A. N. Whitehead, Harvard University, Cambridge, Massachusetts.
Wier, Eva A., 44 Concord Avenue, Cambridge, Massachusetts.
Wilkinson, Robert O., Harvard University, Cambridge, Massachusetts.
Winslow, E. M., *Graduate Student*, 71 Kirkland Street, Cambridge, Massachusetts.
Wood, Chester F., *Graduate Student of Theology*, Newton Center, Massachusetts.
Wood, Mrs. William J., West Manchester, Massachusetts.
Woodbury, Benjamin, 11 Marlborough Street, Boston, Massachusetts.
Wright, Dorothy M., *Graduate Student*, 36½ Joy Street, Boston, Massachusetts.
Wu, Shih Tung, *Graduate Student*, 333A Harvard Street, Cambridge, Massachusetts.
Wu, Wen Tsao, *Graduate Student*, Furnald Hall, Columbia University, New York City, New York.
Wyatt, William F., *Professor of Greek*, Tufts College, Tufts College P.O., Massachusetts.

Yuge, Tassho, *Graduate Student*, Rukaku University, Kyoto, Japan.

Zia, Joseph, 102 Avenue B, New York City, New York.
Zimmerman, Joseph Louis, *Graduate Student*, Prescott Hall, Cambridge, Massachusetts.

6. MINUTES OF THE MEETINGS OF THE PERMANENT INTERNATIONAL COMMITTEE

THE Permanent International Committee met at 3:30 P.M., Tuesday, September 14, in the Gore Hall Common Room. Professor H. Wildon Carr, Honorary Secretary of the Fifth Congress (appointed for London, 1915, but interrupted by the World War), presided. Professors L. Lévy-Bruhl and A. C. Armstrong were added to the Committee, and the latter requested to act as its Secretary.

The question of the reorganization of the Committee was discussed, in view of the many losses by death since the Fourth Congress, Bologna, 1911, and the incapacity of other members through age or infirmity. The following were elected to the Committee:

C. Alberini (Buenos Aires); T. G. Masaryk, K. Vorovka (Prague); C. Bouglé, L. Brunschvicg, É. Gilson, A. Lalande, P. Lapie †, L. Lévy-Bruhl, E. Meyerson, Abel Rey, L. Robin (Paris); B. Bauch (Jena), E. Becher (Munich), E. Cassirer (Hamburg), Nicolai Hartmann (Cologne), E. Husserl (Freiburg i. Br.), M. Scheler (Cologne), E. Spranger (Berlin); S. Alexander (Manchester), G. Dawes Hicks (London), John Laird (Aberdeen), A. D. Lindsay (Oxford), G. E. Moore (Cambridge), W. D. Ross, J. A. Smith (Oxford), A. N. Whitehead (Cambridge, U.S.A.); S. Dasgupta, S. Radhakrishnan (Calcutta); A. Aliotta (Naples), G. Gentile, G. Tauro (Rome); G. Kuwaki (Tokyo); H. Weyl (Zurich); G. P. Adams (Berkeley), A. C. Armstrong (Middletown), J. Dewey, W. P. Montague (New York), R. B. Perry (Cambridge, U.S.A.), J. H. Tufts (Chicago), J. H. Woods (Cambridge, U.S.A.).

The Secretary was instructed to present these names to the Congress for ratification at the General Session, Division A, Tuesday Evening, September 14. (This instruction was carried out and the elections were ratified by the Congress.)

The question of the time and place for the next Congress was considered, and the proposal made that it be convened in 1930, at Oxford, England. This proposal was discussed with favor, but the decision was postponed to a second meeting of the Committee, appointed for 9:15 A.M., Wednesday, September 15.

Adjourned.

The Committee, as reorganized by the elections of September 14, met at 9:15 A.M., Wednesday, September 15, in the Standish Hall Dining Room, with Professor H. Wildon Carr in the chair. The Chairman explained the proposal to convene the next Congress in 1930 at Oxford, and Professor J. A. Smith of Oxford University extended a hearty invitation on behalf of his colleagues and of the University. The Committee voted unanimously to accept the invitation and appointed the following officers of the Seventh Congress:

Lord BALFOUR } *Honorary Presidents*
Lord HALDANE }
Professor J. A. SMITH, *President*

Preliminary Committee to organize the Congress, the representatives of Oxford at the Sixth Congress:

Professor J. A. SMITH
Dr. H. H. PRICE
Professor W. D. ROSS
Dr. F. C. S. SCHILLER

The Secretary was instructed to present these proposals to the Congress for ratification at its Business Meeting of Friday, September 17. (This instruction was carried out and they were unanimously ratified.)

Adjourned,
A. C. ARMSTRONG,
Secretary.

7. MINUTES OF THE BUSINESS MEETING OF THE CONGRESS

THE Congress convened in Business Session at 4:30 P.M., Friday, September 17, in the New Lecture Hall of Harvard University. Professor W. P. Montague, Vice-President of the Organizing Committee, presided.

The greetings of Professor A. Aliotta, President of the International Congress of Philosophy held in connection with the Seventh Centenary of the Foundation of the University of Naples, 1924, were presented by the Secretary in accordance with the translation transmitted by Professor R. Piccoli. Professor Dr. E. Becher, of the University of Munich, presented the greetings of the *Kant-Gesellschaft.* To these messages of greeting the Secretary was instructed to make appropriate replies.

The Secretary presented the resolutions adopted by the Permanent International Committee concerning the time, place, and officers of the next, Seventh, Congress. These were ratified by the Congress by acclamation.

Professor J. A. Smith expressed the gratification of his colleagues, in particular of the representatives of Oxford, at this vote, and assured the next Congress a cordial welcome.

On motion of Professor H. Wildon Carr, a resolution of thanks was passed to the officers of the Congress, in particular to the younger students who had promoted the work of the Congress and the convenience of its members, and to the institutions and individuals that had entertained the Congress:

The Commonwealth of Massachusetts
Harvard University
Columbia University
The President and the Deans of Wellesley College
The Trustees of the Boston Museum of Fine Arts
Miss Alice Longfellow
Mr. and Mrs. Morris Carter
Mr. Henry Ford

Adjourned,
A. C. Armstrong,
Secretary.

PROGRAM OF THE CONGRESS

MONDAY, SEPTEMBER 13

8:00 P.M. * Opening Meeting, Gore Hall Dining Room

ADDRESSES OF WELCOME

NICHOLAS MURRAY BUTLER, *Chairman, in behalf of the Organizing Committee of the Congress*

A. LAWRENCE LOWELL, *President, in behalf of Harvard University.*

W. E. HOCKING, *President, in behalf of the American Philosophical Association, Eastern Division*

R. C. LODGE, *President, in behalf of the American Philosophical Association, Western Division*

H. W. STUART, *President, in behalf of the American Philosophical Association, Pacific Division*

PRESENTATION OF FOREIGN DELEGATES

RESPONSE IN BEHALF OF FOREIGN DELEGATES

PAUL LAPIE, *Rector of the University of Paris*

At the conclusion of the formal exercises a SMOKER will be held in the Gore Hall Common Room (informal dress)

TUESDAY, SEPTEMBER 14

9:30 A.M.

DIVISION A, SECTION I. Gore Hall Dining Room

Subject: Physics and metaphysics, with special reference to the problem of time

Chairmen: W. P. MONTAGUE, Columbia
E. G. SPAULDING, Princeton

Speakers: E. B. MCGILVARY, Wisconsin (Newtonian Time and Einsteinian Times)
HERMANN WEYL, Zurich (Zeitverhältnisse im Kosmos, Eigenzeit, gelebte Zeit und metaphysische Zeit)

* Open only to Active Members and their wives, and to specially invited guests.

Speakers: A. N. Whitehead, Harvard (Time)
A. V. Vassilieff, Kazan and Leningrad (The acquisitions and enigmas of the philosophy of nature; read by C. I. Lewis, Harvard)
G. H. Mead, Chicago (The objective reality of perspectives)

9:30 A.M.

DIVISION B, SECTION 1. Standish Hall Common Room

Subject: The status and relations of sensa and scientific objects
Chairmen: E. A. Singer, Jr., Pennsylvania
M. T. McClure, Illinois
Speakers: Edgar Wind, North Carolina (Experiment and metaphysics)
G. Dawes Hicks, Cambridge, England (Sensible appearances and material things)
Bruno Bauch, Jena (Stellung und Beziehung von Sinnlichkeit und wissenschaftlichem Gegenstand)
Harold Chapman Brown, Leland Stanford (Why the sensa?)
J. Gibson Hume, Toronto (A concrete universe)

9:30 A.M.

DIVISION C, SECTION 1. Gore Hall Common Room

Subject: The basis of objective judgments in ethics
Chairmen: George Herbert Palmer, Harvard
Theodore de Laguna, Bryn Mawr
Speakers: John A. Ryan, Catholic University of America (read by title)
L. Lévy-Bruhl, Sorbonne
W. D. Ross, Oxford
Mary Whiton Calkins, Wellesley
George P. Adams, California

9:30 A.M.

DIVISION D, SECTION 1. Smith Hall Common Room

Subject: Ancient philosophy. The Socratic and Platonic elements in the doctrines of Plato's dialogues
Chairmen: G. S. Brett, Toronto
Paul Elmer More, Princeton
Speakers: John Burnet, Edinburgh (reported by W. D. Ross, Oxford)

R. C. LODGE, Manitoba (On a recent hypothesis concerning the Platonic Socrates)
LÉON ROBIN, Sorbonne (Sur le *Phédon*)
PAUL SHOREY, Chicago (The question of the Socratic element in Plato; read by R. I. Levinson, Harvard)
W. A. HEIDEL, Wesleyan (The crucial test)

2:15 P.M.

DIVISION D, SECTION 4 (*first session*). Gore Hall Dining Room

Subject: Contemporary philosophy. Reports on present tendencies in different countries
Chairmen: E. L. SCHAUB, Northwestern
WOODBRIDGE RILEY, Vassar
Speakers: JOHN LAIRD, Aberdeen (Great Britain; read by Leonard J. Russell, Birmingham)
FRANK THILLY, Cornell (The United States)
RAFFAELLO PICCOLI, Naples (Italy)

3:30 P.M. * COMMITTEE MEETINGS. Gore Hall Dining Room

8:00 P.M.

DIVISION A, GENERAL SESSION. New Lecture Hall

Subject: The hypothesis of emergent evolution, its meaning and the present state of the argument concerning it
Chairmen: JOHN E. BOODIN, Carleton
H. S. JENNINGS, Johns Hopkins
Speakers: HANS DRIESCH, Leipzig (Emergent evolution)
H. WILDON CARR, London (Life and matter)
ARTHUR O. LOVEJOY, Johns Hopkins (The meanings of "emergence" and its modes)
W. M. WHEELER, Harvard (Emergent evolution of the social)

WEDNESDAY, SEPTEMBER 15

9:30 A.M.

DIVISION A, SECTION 2. Gore Hall Dining Room

Subject: Philosophy of religion, with special reference to mysticism in East and West
Chairmen: FELIX ADLER, Columbia
JAMES B. PRATT, Williams

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* By invitation.

Speakers: Edwin D. Starbuck, Iowa (An empirical study of mysticism)
S. Dasgupta, Calcutta (Eastern and Western mysticism)
Helmuth von Glasenapp, Berlin (Pragmatische Tendenzen in der Religion und Philosophie der Inder)
Charles A. Bennett, Yale (The paradox of mysticism)
Edward Scribner Ames, Chicago (The mystics: their experience and their doctrine)

9:30 A.M.

DIVISION B, SECTION 2. Standish Hall Common Room

Subject: The doctrine of subsistence and essences in current logic and epistemology
Chairmen: G. A. Tawney, Cincinnati
Edmund H. Hollands, Kansas
Speakers: R. W. Sellars, Michigan (Essence and existence for critical realism)
R. F. A. Hoernlé, Witwatersrand ("Existence" and "subsistence" in contemporary logic and epistemology)
Moritz Geiger, Göttingen (The philosophical attitudes and the problem of subsistence and essence)
A. W. Moore, Chicago (Subsistence and existence in neo-realism)

9:30 A.M.

DIVISION C, SECTION 2. Smith Hall Common Room

Subject: Aesthetics
Chairmen: J. Gibson Hume, Toronto
W. A. Hammond, Cornell
Speakers: Stephen C. Pepper, California (Description of aesthetic experience)
Nicolai Hartmann, Cologne (Ueber die Stellung der ästhetischen Werte im Reich der Werte überhaupt)
DeWitt H. Parker, Michigan (Wish fulfilment and intuition in art)
T. Yamada, Tokyo (L'art du drame japonais "No")
Ivy G. Campbell, Wells (Objective form and its rôle in aesthetics)

9:30 A.M.

DIVISION D, SECTION 2. Gore Hall Common Room

Subject: Mediaeval philosophy, with special reference to the problem of creation

Chairmen: Edward A. Pace, Catholic University of America
James H. Woods, Harvard

Speakers: William Turner, Buffalo (Rationalism and mysticism in the scholastic movement; read by Donald A. Maclean, Catholic University of America)
Étienne Gilson, Sorbonne (L'étude des philosophies arabes et son rôle dans l'interprétation de la scolastique)
Tjitze de Boer, Amsterdam (The Moslem doctrine of creation)
Harry A. Wolfson, Harvard (The problem of the origin of matter in mediaeval Jewish philosophy and its analogy to the modern problem of the origin of life)

2:30 P.M.

DIVISION D, GENERAL SESSION. New Lecture Hall

Subject: The rôle of philosophy in the history of civilization

Chairmen: A. C. Armstrong, Wesleyan
Alexander Meiklejohn, Wisconsin

Speakers: Henry Osborn Taylor, New York
Étienne Gilson, Sorbonne
John Dewey, Columbia
S. Radhakrishnan, Calcutta
Benedetto Croce, Naples (The modern conception of philosophy; read by Raffaello Piccoli, Naples)

5:15 P.M. Visit to exhibition of philosophical books, Treasure Room, Widener Library, conducted by Benjamin Rand, Harvard

Thursday, September 16

9:30 A.M.

DIVISION A, SECTION 3. Gore Hall Dining Room

Subject: Philosophy of mind, with special reference to the nature of community between minds

Chairmen: H. N. Gardiner, Smith
Durant Drake, Vassar

Speakers: PHILIP E. WHEELWRIGHT, New York University (The category of self-transcendence as an essential element in the concept of personality)
J. A. SMITH, Oxford (The nature of mind and the reality of genuine intercourse between minds)
WILMON H. SHELDON, Yale (Immaterial non-mental reality)
H. A. OVERSTREET, College of the City of New York (Building the communal mind)
WILL DURANT, Brooklyn (Is philosophy doomed?)

9:30 A.M.

DIVISION B, SECTION 3. Standish Hall Common Room

Subject: The bearing of the distinction of judgments of value and judgments of existence upon logic and epistemology
Chairmen: H. B. ALEXANDER, Nebraska
WALTER G. EVERETT, Brown
Speakers: WILBUR M. URBAN, Dartmouth (Value, logic, and reality)
F. C. S. SCHILLER, Oxford (Fact and value)
LEONARD J. RUSSELL, Birmingham (Value and existence)
A. P. BROGAN, Texas (The implications of meliorism concerning the relation between value and existence)

9:30 A.M.

DIVISION C, SECTION 3. Smith Hall Common Room

Subject: Aesthetics. Philosophy of law
Chairmen: NORMAN WILDE, Minnesota
THOMAS REED POWELL, Harvard
Speakers: ETHEL PUFFER HOWES, Smith (The foundations of aesthetics)
MORITZ GEIGER, Göttingen (Oberflächen- und Tiefenwirkung der Kunst)
MORRIS R. COHEN, College of the City of New York (Positivism and the limits of idealism in the law)
FERNANDO DE LOS RIOS, Granada (The religious character of colonial law in the sixteenth century Spain; read by A. R. Chandler, Ohio State)

9:30 A.M.

DIVISION D, SECTION 3. Gore Hall Common Room

Subject: Mediaeval and modern philosophy
Chairmen: G. Watts Cunningham, Texas
J. A. Leighton, Ohio State
Speakers: Mehmed Ali Ayni, Constantinople (Ismaīl Hakki)
Léon Noël, Louvain (Neo-scholastic epistemology)
James H. Ryan, Catholic University of America (The new scholasticism as a contemporary philosophy)
Benjamin Rand, Harvard (John Locke and Samuel Clarke, 200 unpublished letters)
Léon Robin, Sorbonne (La philosophie d'Octave Hamelin)

AFTERNOON. * Excursions (hour and place to be announced)

8:00 P.M.

DIVISION C, GENERAL SESSION. New Lecture Hall

Subject: Philosophy and international relations
Chairmen: James H. Tufts, Chicago
Wilbur M. Urban, Dartmouth
Speakers: C. Bouglé, Sorbonne (L'orientation de la philosophie, et la préparation de la paix)
Erich Becher, Munich (Darwinismus und internationale Beziehungen)
Coriolano Alberini, Buenos Aires (La filosofía y las relaciones internacionales)
Roscoe Pound, Harvard (The part of philosophy in international law)

Friday, September 17

9:30 A.M.

DIVISION A, SECTION 4. Standish Hall Common Room

Open Session
Chairmen: Alfred H. Lloyd, Michigan
John E. Boodin, Carleton
Speakers: Edgar S. Brightman, Boston University (Personalism and the influence of Bowne)
Richard Müller-Freienfels, Berlin (Das Problem der Individualität)

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* By invitation.

Edwin A. Burtt, Chicago (Real versus abstract evolution)

Giovanni Vidari, Turin (Rapporti fra morale e religione)

9:30 A.M.

DIVISION B, SECTION 4. Gore Hall Common Room

Open Session

Chairmen: H. W. Stuart, Leland Stanford
Walter T. Marvin, Rutgers

Speakers: J. E. Heyde, Greifswald (Das Erkenntnisproblem im Lichte der Philosophie Johannes Rehmkes)

W. M. Kozlowski, Posen (Thought considered as action and the logical axioms)

A. E. Heath, Swansea (The notion of intelligibility in scientific thought)

Karel Vorovka, Prague (Analyse de la relation causale à l'aide du concept d'action suffisante)

C. J. Ducasse, Brown (A neglected meaning of proba bility)

Henry M. Sheffer, Harvard (Notational relativity read by title)

9:30 A.M.

DIVISION C, SECTION 4. Smith Hall Common Room

Open Session

Chairmen: Arthur Hill Daniels, Illinois
Mary Mills Patrick, New York

Speakers: Hilda D. Oakeley, London (The perspective view in ethics)

Paul Lapie, Sorbonne (L'éducation morale dans les écoles françaises)

Giacomo Tauro, Cagliari (La pedagogia, la scuola e l'educazione nella nuova Italia)

J. B. Kozák, Prague (On the basis of objective judgments in ethics)

K. Wize, Posen (Les catégories éthiques et les vertus)

9:30 A.M.

DIVISION D, SECTION 4 (*second session*). Gore Hall Dining Room

Subject: Contemporary philosophy. Reports on present tendencies in different countries
Chairmen: E. L. Schaub, Northwestern
Woodbridge Riley, Vassar
Speakers: Fernando de los Rios, Granada (Spain)
Coriolano Alberini, Buenos Aires (South America, with special reference to Argentina)
Erich Becher, Munich (Germany; read by title)
G. Kuwaki, Tokyo (Japan)
C. Bouglé, Sorbonne (La philosophie en France et le mouvement sociologique)
S. Radhakrishnan, Calcutta (The doctrine of Māyā: some problems)
Ferdinand Pelikan, Prague (Czech national thinking)

2:30 P.M.

DIVISION B, GENERAL SESSION. New Lecture Hall

Subject: Continuity and discontinuity among the sciences
Chairmen: Frank Thilly, Cornell
E. B. McGilvary, Wisconsin
Speakers: Federigo Enriques, Rome (L'unità della scienza)
Erich Becher, Munich (Ueber Unterschiede und Zusammenhang zwischen Wissenschaften)
W. E. Hocking, Harvard (Mind and near-mind)

4:30 P.M. * Business Meeting. New Lecture Hall
7:15 P.M. * Dinner. Copley Plaza Hotel

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* Open only to Active Members.

PROCEEDINGS OF THE CONGRESS

OPENING MEETING

Gore Hall, Harvard University, Cambridge
Monday Evening, September 13, 1926

PRESIDING: Nicholas Murray Butler, Chairman, in behalf of the Organizing Committee of the Congress.

The meeting was called to order at 8:20, and Chairman Butler spoke as follows:

Chairman BUTLER. Mr. President, ladies and gentlemen, it is my agreeable duty, speaking on behalf of the Organizing Committee, to declare the Sixth International Congress of Philosophy to be now formally opened.

Not many words are needed to express our welcome to this distinguished gathering, representing the students of philosophy, its chief exponents, its leaders from a score of lands, who have come together for conference, for discussion, and for a formulation of ways and means to further the high ideals which they daily seek. And in the presence of this crowded audience, surely it requires no questionnaire, no newspaper balloting, to prove that philosophy is popular!

There come to us from across every sea men of light and leading to assemble at this center and seat of learning for this notable event. How young we seem, the oldest of us, in the presence of the traditions which they bring and which they represent!

In the less than three hundred years that have passed since Harvard College was founded, there has grown up here a noteworthy philosophic tradition which has not only represented the best thought of the American people, but which has affected, and at times powerfully affected, the reflective thought of the civilized world.

We Americans are not primarily thought of as given over to the habit of reflection, and to that interpretation of things which is philosophy. We are indeed suspected of being rather practical minded, shrewd if you please, but not in the high sense of the word, philosophical. And yet I wonder whether there is not some significance in the fact that our earliest philosophic representation, back nearly two centuries ago, came at the hands of three men so different in type, so varying in method, and so distinct in the scope of their influence. For, using the word philosophy in the broadest and most general sense, surely we must class Benjamin Franklin, with his homely and benignant wisdom, as at least a practical philosopher and one who practiced reflection and did what he could to induce the habit of reflection by others. Then there was the sonorous and portentous theologizing of Jonathan Edwards, the representative of another and very powerful type in this country, some aspects of whose thinking are not absent from this land at this moment. And then there was Samuel Johnson of Connecticut and New York, cast in a very precise academic mold, but giving fine and clear, if conventional, exposition to the problems of logic and of morals.

These three men stand out in the intellectual life of the eighteenth century in what is now the United States, Benjamin Franklin, Jonathan Edwards, and Samuel Johnson, as three representatives of the reflective and interpretative type.

But I suspect that our American philosophy, again speaking in the broad and popular sense, finds its widest and largest influence and exposition in Mr. Emerson. If we take his method, if we take his ideals, if we take the power of his style, and if we take his influence upon American literature and American life, surely they made for interpretation, for the love of reflection, and for the attempt to ascertain standards of genuine value. After Emerson came what may be called the academic revival and renaissance, inspired by the universities of Germany, of France, and of Italy, and the important movement of which we today are still a part.

But this Congress indicates something more. It indicates that the terrible breach made in the orderly life of the world and in the thought of the world, by the most colossal of wars, is over. In the spirit of Locarno, in the spirit of those two noble and moving orations that were made at Geneva on Friday last by Dr. Stresemann and Monsieur Briand, we welcome to the place that of right belongs to them those of our scholars in philosophy who speak the German tongue.

We appreciate to the full the nobility of the attitude of the people and the Government of France as voiced by the eloquent Minister of Foreign Affairs, and I am sure that I am within the truth, Monsieur Lapie, when I say that the imagination of this nation has been touched and its heart warmed and its conscience reached by his eloquent speech at Geneva on Friday last.

Philosophy speaks no single language. It knows the language of Aristotle and of Plato. It knows the language of Cicero and the schoolmen of the Middle Ages. It knows the languages of Italy and of Spain and of Scandinavian peoples, and is learning the languages of the Orient. The philosophic temper, the reserve, the detachment, the seriousness, and the independence of philosophy are what this world most needs just now to calm the raging billows of competition and discord and hate, and to carry mankind forward, even a little forward, toward those great ideals of international association and friendship and peace that will permit man's every effort to be expended on the higher satisfactions of the race, thus making a new day for philosophers, for philosophy, not as something apart from life, but as an attitude, as a state of mind, as a temper, and a teaching that will take firm hold of life and guide it to its high purpose.

It is not for me by any word to anticipate the discussions and debates that are to follow, but I cannot refrain from pointing to what seems to me to be the large significance of this notable gathering. We owe its success to those who have organized and developed the Congresses of the past, to those members of the Organizing Committee at Harvard University and elsewhere who have labored so long and so effectively to make the arrangements, by the excellence of which we now profit, and we owe it to the gracious and generous hospitality of Harvard University, itself a seat and center of philosophy, whose president is to do us the honor of offering us welcome.

Address of A. LAWRENCE LOWELL, President, in Behalf of Harvard University.

Mr. President and members of the Congress, it is a great honor and a great pleasure to welcome you here, both on account of the luminous trail that has been left among us by William James, by Royce, and by others, and because, to one who is not a philosopher, it seems as though philosophy had a future.

We have learned to live, but we have not learned why we live. We have lived faster than many people, but we do not know why we do it. Now, we want to know where we are going. We are burning our coal and oil, but what for? In order that posterity may be bankrupt, or in order that it may be better? Do we think of anything but the speed with which we are doing something which may be after all nothing more than a turning of a squirrel's wheel?

There is another reason why I think philosophy is needed now. Great advances have been made by the methods of excessive specialization. The world is like a boat sailing to windward which sails first on one tack and then on another, but cannot sail in the eye of the wind. Man seems to be always accentuating one thing at a time, when he is sailing to windward. We have learned a great deal by specialization, but has not the time come for a synthesis of what we know? Today the sciences are coming together. No man can draw a line between physics and chemistry; botany and zoölogy touch. Except by an arbitrary assignment we do not know to which the protozoa belong. We need at the present day something that will break down the barriers between subjects. Indeed, we are losing something in this land of ours by excessive organization. We organize departments so rigidly that nobody may look into a subject that does not belong to him, for fear of being despised by those who are experts in it. We need to break down those barriers, and that is the work of philosophy. This we need now more than we have needed it for a long time. We need men who will sit on the border line of subjects and look with a philosophic eye over more than one field. And what is more, we need to have each man study his own subject as a part of universal knowledge, — which means universal philosophy. But, gentlemen, you do not want to hear from me, because ignorance could talk forever.

Chairman BUTLER. President Lowell in closing has set a standard of brevity for the remarks that are to follow. I have pleasure in presenting the presidents of three divisions of the American Philosophical Association, who will, each in turn, offer welcome to the foreign members of this Congress, and to those of our own land who have come some distance to be with us. I have pleasure in presenting to you Professor W. E. Hocking, who speaks as president of the Eastern Division of the American Philosophical Association.

Address of W. E. HOCKING.

Mr. President, members and delegates from various lands, it is my privilege on behalf of the Eastern Division of the American Philosophical Association to bid you welcome. You have come from afar, and you honor us by your presence. Meetings of this character are and ought to be unusual. Philosophy has no corporate existence. Its labor is an individual labor, frequently a solitary labor; it is a labor which lives in the insight of individual man, and which requires for its development strenuous and severe individual effort.

Socrates was an individual philosopher. It is not recorded of him that at any time in his life did he go for forty days and forty nights into the wilderness to commune with himself, and yet it was in the mouth of Socrates that we are assured that reflection resembles the pursuit of death; for reflection implies a retirement not merely from the business of the senses, but even from social intercourse with one's fellows.

In a recently published letter of John Locke, I find these words with reference to the conditions under which he composed his *Essay on the Human Understanding*.

> "I have purposely avoided the reading of all books which treated in any way of that subject, that I might have nothing to bias me in any way, so that if my motives at any time coincide with others it is not that I follow them, and if they differ it would not be by contradiction or a mind to be singular."

And I remember a remark of our honored and beloved colleague in France, Henri Bergson, who has been unfortunately secluded for some time but is happily recovering as I understand. Professor Bergson at one time mentioned the fact that the composition of each of his great works cost him not only the mastery of a new science but also the complete abstinence from the reading of all philosophical literature. It seems to me quite true that a philosopher's connections are first with his fellow citizens, for philosophy is not only an individual undertaking, but also to some extent is a national undertaking. Philosophy has and ought to have a national quality. It has a normal organic alliance with literature, with the literature of the country, and with its traditions. While the questions proposed to philosophy are universal human questions, they take their color, their existence, and their immediate application from the life of the people, — I might even say, the life of the province. Philosophy is a national undertaking.

But, then, besides all this, fruits of philosophy are for the healing of the nations; else we could hardly realize, to the extent which we do realize on this occasion, the unity of reason, the unity of truth, and the fact that it is the realization of a common destiny, of a common position in the universe, a common share in the goals of mankind, — that it must act as the ideal and medium in bringing together the souls and activities of men.

Those of us who have been interested in the vistas of men in different parts of the earth have observed that farmhouses are seldom on hilltops, because streams of water seldom go on hilltops, and the farmhouses must be near the springs. And then, farmhouses must be in the shelter of prevailing winds and the hilltops are not a shelter to anything. Men do not build their dwellings upon hilltops, but they build their shrines upon hilltops, and those of us whose business it is to labor on the mental shrines of mankind are contributing to the vistas in which all men live.

Our business is an important business, and furthermore, a happy business. There are few more happy activities than philosophic conversations. Professor Royce of revered memory once said in considering the different types of communities, that the hilltop seminary approached his ideal of the human group, and added that if there were hilltop seminaries in heaven he would be quite content to go there. May your conferences this week be of that character, and may the outcome justify you for the sacrifice you have made to be with us.

Chairman BUTLER. To speak on behalf of the Western Division of the American Philosophical Association, I present Professor Lodge of the University of Manitoba, of the Western Division.

Address of R. C. LODGE.

Mr. Chairman, members of the Congress, on behalf of the Western Division of the American Philosophical Association I wish to extend to you a very hearty welcome, and to say how glad our members are to see you and to be able to talk with you so far as they can. I listened to some of your conversations during the dinner, and no doubt they will be better when we get to the technical philosophical subjects which we all understand, rather than the actual equivalents in Italian, French, and German for the edibles which are so kindly served to us.

It has been suggested that I try to say something about the philosophic development, or the development of philosophy, in the West. It is thought that this might be interesting to you, because it has been so rapid. A friend of mine, who is a botanist and a specialist on mushrooms, was asked why he went to one of the Western universities. He went there, he said, because he looked up the city in the encyclopedia and found it was a mushroom city. Now, philosophy in the West is something like that. There is no generalization as to the North, the West, and the South which would be universally true, but I will try to keep as close to the truth as I can in all that I have to say to you.

The effective territory of the Western Division is bounded on the east by Michigan, on the west by Nebraska, on the south by Texas, and on the north by Minnesota or Manitóba. Our chairman's pronunciation, Manitobá, is the correct one, but I have not heard it up there for a long time, and no doubt they have forgotten that it is correct.

The universities in the West are of mushroom growth, and there are very few universities that have been teaching philosophy as long as fifty years. I cannot think of any that I can mention which have been teaching philosophy for even fifty years, and the university with which I am associated has been teaching philosophy officially for only six years.

It follows from this that we have no very long established philosophical traditions, such as you have in the Old World. We have no very long established philosophical interests. Our students accordingly regard philosophy as something of a new subject, and those of them who go on and take graduate work do so largely because the novelty has not yet worn off. Their enthusiasm for things of the mind has been awakened by the stimulus of their undergraduate contacts, and has not yet sunk back into the twilight stage, as it does when they come to live more among practical men of affairs.

Some students come to us from Europe, — some from the University of Paris, some from the University of Berlin, some from the University of Oxford. The first thing about our philosophy in the West, which such students from the older universities of Europe notice, is its extreme practicality. There seems to be an utter absence of academic standpoint and of strictly theoretical interest. It seems as though academic interests have no place in our Western philosophizing. That is the first impression which a European student gets. But the second impression is different. The student comes to see that the local and non-academic appearance of our philosophizing is due partly to the distance of our Western institutions from each other. And then, when one gets still better acquainted with what the different men are thinking and writing, one finds that, in spite of the practical appearance, there is nothing exclusively practical about it. It is just as academic, so far as I can see, and just as conservatively theoretical, as the Old-World type of philosophy, or even the neo-idealistic philosophy of which we hear so much in recent Italian publications. It is just as unpractical and just as academic beneath the surface.

We need your presence among us to help us to feel that coöperative effort means something, and that philosophizing is not primarily a local matter, or an attempt to speak the language of distant localities instead of the language of the universe. We from the West derive a great deal of advantage from this opportunity to overcome the effects of distance and to establish personal contacts with you. And as representing the Western Division of the American Philosophical Association, I again wish to say how grateful we are to you all for coming, for your presence with us, for the coöperation which you undertake with us. I hope that the meetings will all illustrate this spirit of harmony and of common interest.

Chairman BUTLER. Professor Lodge's reference to the pronunciation of the name of the province which his university adorns reminds me of an item which I read the other day in the always veracious newspaper press. It is an account of a society of nurserymen, who were holding a convention in the state of Alabama. They are interested in a plant the name of which is spelled G-l-a-d-i-o-l-u-s, and they passed two resolutions: First, resolved, that as 100 per cent Americans we denounce the attempt to compel us to pronounce this word on the alleged authority of a dead language. Second, that the correct and official pronunciation is declared to be gladiólus and the plural form is gladióluses. To speak on behalf of the Pacific Division, I have the pleasure of presenting Professor Stuart of Stanford University.

Address of H. W. STUART.

Mr. President, ladies and gentlemen, members of the Congress, it is my privilege to say a few words of welcome, in behalf of the Pacific Division of the Association, to the delegates to this Congress from foreign lands. To our entire division, and not alone to those of us who can attend the sessions of the Congress, the presence at a gathering of philosophers in America of so many visitors from abroad is an event of impressive significance. It means to us, not that Europe and the Orient have come to America, but it means that America has been drawn, once for all, into the main current of international philosophy.

American culture in general, American philosophy, art, and literature, have had in the past what may fairly be called a colonial character, as it seems to me. The colony is apt to be in many matters more conservative than the country from which it has been settled. There is a somewhat unimaginative trust which adheres to the legacy of the founders, a tendency to cling to the small details of this legacy, after the mother country, in the course of its development, has modified or discarded those institutions which the colony took with it at the time of its establishment. When a colony, on the other hand, does depart from the standards with which it was established, it is apt to diverge in a somewhat hasty and perhaps ill-considered way, in a way that looks too closely to the details of the provocation to change, and in a way that is tempted into hasty action by the hope of results which answer immediately to the felt need of the moment. These are in fact quite universal characteristics of a colonial society, and American culture has had in the past very largely a colonial character.

Our emergence into cultural independence will, I think, when it comes, have been no sudden escape from dependence, no mere casting off of bonds and inheritances, but it will be a gradual process, a process controlled by a constant bearing in mind of these two characteristics of the colonial society which I have referred to. It will be a process without commotion, without the sounding of trumpets, but a new and constructive process of the kind I have suggested.

A Congress like the present can do much in ridding American philosophy of such colonial characteristics as it has had in the past. I think that a Congress like this is certain to bring to us of the Western World, and especially to us of the Pacific Coast, a sense of the free life and the progressive movement in thought of countries beyond the seas; and it must also give us, perhaps I may say, a cool and tempering realization of the importance of other points of view, and of other methods of approach to philosophic problems, than those which have characterized some of our recent American philosophical undertakings.

In the measure that the Congress does serve this twofold purpose, and does render this twofold service, it will have contributed to a development of a real American philosophic autonomy and it will also have given immeasurable aid to American thought in its attainment of a larger international influence and significance than it has, up to this time, possessed.

Chairman BUTLER. I am advised by the Organizing Committee, that this Sixth International Congress as now constituted has more than 350 members from the United States and 70 foreign members whom I shall present by their several countries, in one moment. Before doing so I call the attention of the Congress to the fact that there are a few men of great distinction, deeply interested in these Congresses, each one of whom would gladly have been here tonight, but who for one reason or another, usually, I am sorry to say, because of ill health, are detained.

I refer to Monsieur Xavier Léon, who was really in a sense the founder, or earliest organizer, of these International Congresses of Philosophy, who has been always active in promoting them, and who has participated by his counsels, his labors, and his good will, in the preparation for each succeeding Congress including the one upon which we are now engaged.

And Professor Henri Bergson, who would equally have been here, but who unhappily has been ill for two years, and although he bids fair to conquer the malady from which he has been suffering, still it prevents him from taking a journey such as this to America.

Also, Professor Hans Vaihinger of Germany, who writes with tragic sadness that his intention to be present has been frustrated by approaching blindness. Surely it is a tragedy that a mind so brilliant and so powerful should lose the light of its earthly eyes.

Professor Harald Höffding, who cordially responded to the invitation to join us, regretting only that he could not see his way clear to come to America this year.

And Bernardino Varisco of Italy, who decided that his age and retirement from active service precluded his leadership of the delegation from Italy.

Also Mr. Samuel Alexander of England, who felt that the chairmanship of the National Advisory Committee for Great Britain was all that he was able to undertake.

It has been a custom of these Congresses to send greetings to such honored leaders, authorizing the Secretary to send on our behalf appropriate messages, and it is suggested that this tradition be continued tonight, by sending messages of greeting to the six eminent philosophers whom I have named, who would so gladly have been with us here. Does that suggestion commend itself to the members of the Congress?

Is there dissent? I will interpret, Mr. Secretary, the manifestation of satisfaction as giving approval.

The foreign delegations are distributed as follows:

From Argentina,	1
From Belgium,	1
From Canada,	10
From Czechoslovakia,	3
From France,	6
From Germany,	12
From Great Britain,	14
From Holland,	1
From India,	2
From Italy,	4
From Japan,	3
From Poland,	5
From Portugal, Russia, South Africa, Spain, Switzerland, one each.	
From Turkey,	2

Nothing could be more appropriate than that a word of response on behalf of these visitors whom we so warmly welcome, should be given by the Rector of that university which has preserved the philosophic traditions from the days of William of Champeaux, and Abelard, the university which was hoary with age and good work when our universities were born. I present with the greatest possible pleasure our distinguished guest, the Rector of the University of Paris, M. Lapie.

Address of PAUL LAPIE.

Monsieur le Président, Mesdames, Messieurs. L'aimable collègue qui a désigné pour cette cérémonie l'orateur des délégués étrangers n'est certainement pas l'ennemi du paradoxe. Pour remplir convenablement cet office, il serait nécessaire de connaître les traditions de vos Congrès internationaux. Et le malheur veut que je n'aie pu assister à aucune de ces assemblées. Pour remplir convenablement cet office dans une ville comme Cambridge, il serait nécessaire de parler anglais. Et le malheur veut qu'en bon Français je ne pratique ni une langue étrangère ni une langue internationale assez du moins pour oser l'employer devant une si docte assistance. Si donc m'est échu le privilège — dont je sens tout le prix — de répondre au nom de tant de philosophes éminents aux paroles de bienvenue que nous venons d'entendre, je ne me dissimule pas que je ne le dois pas à mes aptitudes personnelles. Je le dois à l'Université que j'ai l'honneur de représenter; n'était-elle pas elle-même, l'antique Université de Paris, comme un Congrès permanent de Philosophie — et un Congrès international — au temps, évoqué tout à l'heure par M. le Président Butler, où la parole d'Abélard attirait sur la montagne Sainte-Geneviève tant de dialecticiens d'Allemagne et d'Angleterre, d'Italie et d'Espagne, ardents à discuter, par des méthodes différentes des nôtres, ces problèmes relatifs aux premiers principes que nous agiterons demain, énoncés en termes modernes, dans nos séances du Congrès?

Mais, en ces temps lointains, il eût été bien difficile de réunir un Congrès de Philosophes en Amérique! Si du moins il s'en est tenu, nos ancêtres ne paraissent pas y avoir été invités. Même en 1926, la tâche qui consistait à rassembler ici des philosophes de tous les continents n'était pas une tâche aisée. La mer n'est pas l'amie des Congrès. Et la mer n'était pas le seul obstacle que rencontraient, à cette date précise de l'histoire, des organisateurs de cette réunion. Ces difficultés, que vous me dispenserez d'énumérer, ont été résolues avec une largeur de vues, une générosité dont nous vous sommes tous profondément reconnaissants. L'accueil qui nous est fait depuis que nous avons mis le pied sur le sol des États-Unis ne nous surprend pas, mais il nous touche infiniment. Nous remercions l'*American Philosophical Association*, qui a pris l'initiative du Congrès et dont nous venons d'entendre les trois présidents. Si je pouvais oublier que j'ai l'honneur de parler en ce moment au nom de tous les délégués étrangers, et non pas seulement au nom des délégués français, je vous dirais que j'ai reçu du président de la *Société française de Philosophie*, M. Xavier Léon, la mission spéciale d'exprimer en son nom à l'Association soeur toute sa gratitude. Nous remercions l'Université Harvard et le Président Lowell de l'hospitalité qui est si cordialement offerte au Congrès et aux congressistes. Nous remercions les membres du Comité d'organisation, tous leurs collaborateurs, tous ces jeunes maîtres ou étudiants qui n'ont pas hésité à interrompre leurs vacances pour venir se mettre à notre disposition et pour assurer le bon fonctionnement de tous les services du Congrès. Et nous remercions enfin celui qui est à la tête de ce Comité, M. le Président Butler, qui a bien voulu ajouter à toutes ses tâches celle de préparer notre venue et de nous accueillir.

Et maintenant que, grâce à tant de bonnes volontés, nous voici réunis, il ne nous reste plus qu'à nous mettre au travail avec l'espoir que ce travail sera fécond. Cet espoir est-il raisonnable ? Depuis que nous avons annoncé notre dessein de venir ici, n'avons-nous pas tous entendu des sceptiques murmurer à nos oreilles: « Qu'allez-vous faire à ce Congrès ? Et quel peut bien être l'objet d'un Congrès de Philosophie ? »

« Tout congrès de philosophie n'est-il pas un anachronisme ? La philosophie n'est-elle pas morte ? N'est-elle pas résorbée dans la science ? ou dans telles et telles parties de la sciences ? On comprendrait la réunion d'un Congrès de psychologues, de psychiâtres, de sociologues, de pédagogues, d'épistémologues ou d'historiens de la philosophie (car la philosophie appartient à l'histoire). Mais un congrès de philosophes !

« Un Congrès de philosophes, continuent-ils, c'est une contradiction dans les termes ! La philosophie, si elle existe encore, est un art individuel. Le philosophe, par définition, c'est un penseur solitaire. C'est un homme qui, pour méditer, se retire du monde et qui doit à cette retraite elle-même la vigueur de sa pensée et l'originalité de son système. Le philosophe, c'est Descartes dans son « poêle, » c'est Spinoza dans sa chambre d'artisan. Voyez-vous Spinoza dans un Congrès de Philosophie ?

« Si vous voulez à tout prix, concluent nos sceptiques, réunir des philosophes en Congrès, que ce soient des Congrès nationaux ! Entre penseurs dont les habitudes intellectuelles sont semblables, d'utiles ententes peuvent intervenir. Mais quels résultats espérer d'un Congrès international ! Voyez-vous sur les bancs d'un même Congrès Hegel et John Stuart Mill ? »

Messieurs, nos prédécesseurs des cinq premiers congrès internationaux de philosophie ont déjà résolu ces doutes et prouvé le mouvement en marchant. Suivons leur exemple.

Et d'abord, ne laissons pas dire que la philosophie n'existe plus et qu'elle doit se dissoudre ou se résorber dans les sciences. Pour mon compte, je ne suis pas de ceux pui pensent que la philosophie doit prendre à l'égard des sciences une attitude de méfiance et que la méthode de la philosophie doit être aux antipodes des méthodes scientifiques. Tout système qui met une sorte de coquetterie à prendre le contre-pied de la science, si subtil, si ingénieux qu'il puisse être, risque fort d'apparaître bientôt comme une construction artifielle et fragile, comme un beau poème sans valeur objective. Bien téméraires aujourd'hui sont ceux qui ont la prétention de s'en remettre, pour d'écouvrir la vérité philosophique, à des moyens de connaître différents de ceux qui ont fait leurs preuves dans la recherche des vérités scientifiques. Si l'intuition conserve sa place, à côté du raisonnement, dans la découverte de la vérité, c'est à la condition d'être une intuition vérifiable et, par suite, raisonnable et rationnelle. Le philosophe, à mon humble avis, doit tenir à rester en constant accord avec le savant. Mais, quel que soit notre respect de la science, notre désir de la défendre contre quiconque voudrait la sacrifier, notre ferme résolution de travailler à son progrès, nous n'entendons nullement abdiquer devant elle. La discussion de ses méthodes et de ses résultats, la coördination de ses conclusions demeurent les tâches propres du philosophe : n'arrive-t-il pas que des savants, parce qu'ils refusent de philosopher, restreignent ou, au contraire, étendent à l'excès la portée de leurs découvertes ? N'arrive-t-il pas qu'en s'enfermant dans leur spécialité, ils ne tirent pas de leur pensée tous ses fruits ? Nous avons donc le droit de nous livrer à un travail de critique et à un travail de synthèse qui ne sont pas expressément scientifiques et qui sont philosophiques. Ajoutez à cette double tâche celle qui consiste à tirer des constatations de la science des applications pratiques, à utiliser la vérité pour l'action morale, à transformer les indicatifs en impératifs, à déduire des jugements d'existence les jugements de valeur. Même si l'on croit — comme je le crois moi-même — que cette déduction ne s'opère pas par des moyens anti-scientifiques, on doit reconnaître qu'elle n'est pas du ressort du savant. Et c'est encore un vaste domaine qui est ainsi réservé à la philosophie.

Ce domaine doit-il être exploré par des penseurs solitaires, à qui serait interdite toute action collective analogue à celle que nous allons entreprendre dans ce Congrès ? Mais, Messieurs, le philosophe n'a jamais été le penseur solitaire de la légende. Sa pensée s'est toujours enrichie au contact de la pensée d'autrui. J'évoquais tout à l'heure le souvenir des assemblées de dialecticiens qui se réunissaient, au moyen-âge, sur notre montagne Sainte-Geneviève. Mais ne faut-il pas remonter plus haut dans le passé ? N'étaient-ce pas des Congrès de philosophie qui se tenaient à Athènes, au temps de Socrate, lorsque de la grande Grèce et des îles comme des diverses cités de l'Hellade les sages venaient y exposer et y confronter leurs doctrines ? Il est vrai qu'à partir du XVIme siècle l'invention de l'imprimerie a permis au philosophe de rester dans sa « librairie » sans entrer en contact personnel avec ses disciples ou avec ses adversaires. L'imprimerie a tué pour un temps la discussion orale. Mais est-ce à dire qu'elle ait tué toute discussion ? Les grands philosophes, de leur retraite en apparence solitaire, ont continué à se nourrir de la pensée de leurs pairs, à former la pensée de leurs élèves, à discuter la pensée de leurs émules. De là ces admirables correspondances où nous saisissons leurs idées sous leur forme la plus franche, la plus spontanée, la plus intime. Nul doute que, s'ils avaient disposé de moyens de transport aussi perfectionnés que les nôtres, ils n'eussent fait pour se rencontrer plus d'efforts. Si la machine à vapeur avait été découverte deux siècles plus tôt, Descartes et Pascal se seraient vus plus d'une fois. Et qui sait si les conversations de ces deux génies, après avoir dissipé les premiers malentendus, ne leur auraient pas suggéré d'inappréciables découvertes ? En vérité, Messieurs, il n'y a pas de pensée individuelle, j'entends de pensée qui appartienne exclusivement à l'esprit où elle apparaît ; il n'y a pas de penseur, si original soit-il, qui ne doive quelque chose à ses devanciers ou à ses contemporains. L'originalité même d'un système est due le plus souvent soit à une synthèse nouvelle d'éléments étrangers, soit à une réaction contre des doctrines étrangères : en tout cas, elle suppose d'autres pensées. C'est cette nécessité de la pensée d'autrui, c'est cette condition sociale de la pensée individuelle que nous reconnaissons lorsque nous nous réunissons en Congrès.

Tout ce que je viens de dire de la pensée individuelle, je pourrais le répéter de la pensée nationale. Certes, chacun de nous pourrait tracer une sorte de portrait composite des philosophes de son pays tel qu'il ne ressemblerait guère à celui des philosophes du pays voisin.

Et, pourtant, il ne faudrait pas croire que chaque philosophie nationale naît et croît en se nourrissant exclusivement de son sol. Elle ne vit que grâce à des apports étrangers, grâce à des échanges perpétuels avec les philosophies étrangères: que seraient Locke ou Leibnitz si Descartes n'avait pas vécu? Ce n'est pas seulement dans le domaine de la politique, c'est aussi dans le domaine de la philosophie qu'est vrai le mot que je me plaisais à lire récemment dans un livre du Président Butler: de même que l'individu ne se suffit pas à lui-même et que, pour se parfaire et pour survivre, il doit arriver à posséder l'esprit social, de même « pour se parfaire et pour survivre, il faut qu'une nation arrive à posséder l'esprit international, il lui faut acquérir l'habitude de considérer les diverses nations du monde civilisé comme des collaboratrices amies. » Pareillement, pour se parfaire et pour survivre, une philosophie national doit considérer les philosophies des autres nations comme des « collaboratrices amies »; elle doit se considérer elle-même comme solidaire des autres. Et c'est précisément cette solidarité que vous avez voulu affirmer dans ce Congrés.

Mesdames et Messieurs, c'est sur ces pensées que je veux finir. Lors du Congrès de Heidelberg, un philosophe allemand disait que nos réunions avaient pour but de travailler « durch die Nation für die Menschheit. » Oui, nous pourrons travailler « par la nation pour l'humanité, » à la condition que les nations aient elles-mêmes le sentiment de leur mutuelle solidarité et possèdent, suivant le mot du Président Butler, l'esprit international.

The Organizing Committee desire to record their deep regret at the death of Professor Lapie, which took place in the interval between the close of the Congress and the publication of these *Proceedings*. They feel sure, also, that in this they represent the entire membership of the Congress.

Chairman BUTLER. The program of the Congress which is in your hands provides for assembling by sections tomorrow morning at 9:30, under the presidencies here noted, for the papers and discussions here named. This evening, following adjournment, which will take place immediately, the Committee have arranged an opportunity for the members of the Congress to meet together informally and to discuss in such fashion as to them seems proper the thoughts uppermost in their minds. They have chosen the word "Smoker"

to describe this occasion. I am not authorized by the Committee to say so, but I have a notion that they would have used the word "Conversazione" had they not thought of Eugene Field's definition of a conversazione as

> "A place in which the people speak
> A tongue in which they are especially weak."

The meeting is now adjourned.

PAPERS READ AT THE
SIXTH INTERNATIONAL CONGRESS
OF PHILOSOPHY

(*ARRANGED BY DIVISIONS*)

SIXTH INTERNATIONAL CONGRESS OF PHILOSOPHY

Division A

METAPHYSICS

Philosophy of Nature, Philosophy of Mind, Philosophy of Religion

1. GENERAL SESSION

Time: Tuesday, September 14, 8.00 P.M.
Place: New Lecture Hall
Subject: The Hypothesis of Emergent Evolution, its Meaning and the Present State of the Argument Concerning It
Chairmen: JOHN E. BOODIN, Carleton
H. S. JENNINGS, Johns Hopkins

EMERGENT EVOLUTION

HANS DRIESCH
(*Leipzig*)

EMERGENT Evolution has been made a technical term by C. Lloyd Morgan, the word " emergent " having been used already by G. H. Lewes as contrasted with " resultant." Morgan refers to J. S. Mill's concept of heteropathic laws as the ultimate root of the concept in question.

The new thing in Morgan's book, then, is the concept of an *evolution* which is emergent; evolution, in the broadest sense, meaning " the comprehensive plan of sequence in all natural events." An evolution is emergent as far as the " incoming of the new " is in question; and this according to Lloyd Morgan is the case in the inorganic world as well as in the organic. If we look upon empirical reality as one Unity we find the series: atom, molecule, crystal, life, mind, reflective thought. Each subsequent phenomenon is newly incoming with regard to its antecedents.

Emergent evolution, thus, is the contrary of a mere " regrouping of preëxisting elements." But it must be conceived " without invoking any extra-natural power," such as entelechy, *élan vital,* etc., — with the only exception of God.

That all subsequent phases in an emergent evolution are " unpredictable " from the antecedents, is its main characteristic according to our author; and this holds in particular with regard to life. Thus it happens that of all " isms " vitalism seems to be the most legitimate one.

Emergent evolution stands in contrast with all sorts of " mechanistic interpretation," that means, with all interpretations " in terms of resultant effects only " or of " summation."

The " New " that appears in emergent evolution is in the main a new sort of " relatedness "; and in particular, of " effective relatedness," appearing under the aspect of causation; effective relatedness standing in opposition to non-effective, that means mere reflective relatedness, such as " similar," " near to," etc. The emergent appearance of mind, e.g., belongs here. But it must not be forgotten that the word " mind " has a double meaning; for Morgan is a disciple of Spinoza. Mind, therefore, means, first, the " parallel " to every event in nature, and, secondly, the specific conscious mind in the narrow sense.

" What, then, makes emergents emerge? " The answer is: God as the ultimate all pervading activity. This, at least, is Morgan's " philosophic creed."

There have been two aspects of evolution in the history of science and philosophy. Evolution has been regarded either " as the unfolding of that which is enfolded," " the rendering explicit of that which is hitherto implicit," or it has been considered as " the outspringing of something that has hitherto not been in being " in the truly " epigenetic " sense. Only the second kind of evolution is emergent: the subsequent phases have " no being at all at the preceding stages of the evolutionary process " — except always God as " an acknowledged directive, immanent Activity " " omnipresent throughout," as " Causality," not as " causation." " All evolutionary process depends " on Him, as its " ultimate source."

Emergent evolution, then, does neither " interpret the higher in terms of the lower " nor vice versa. —

So much about Lloyd Morgan's principal statements.

We now proceed along our own route, and shall say in the first place, that we do not believe that there is any sort of " evolution " in the inorganic world, neither emergent nor non-emergent. For, according to modern physics and chemistry, there *is* nothing but " resultant " effects in this field of empirical reality. Electrons, or electric fields or ether, as you like, are the ultimate elements here, and all future events are " predictable," if only you know the position and velocity of these elements at a given time and the fundamental causal law of acting. All particulars, in fact, are nothing but " resultants " in consequence of " regrouping." We may call this the doctrine of the Uniformity of the inorganic world. If only we knew the very details, we, in fact, *should* be able to predict the peculiarities of water from those of hydrogen and of oxygen, and even a newly appearing " color " might be predicted, supposing we knew also the fundamental laws of psychophysics. Morgan makes a very fine distinction here between " quality " and " property," the former being a peculiarity in itself, the latter being of the form of a relation; color, then, is a " property." But also properties are certainly " predictable."

Morgan tells us that " a molecule would not foretell the relations which it will obtain in liquids or in solids." But this, in my opinion, is not the point in question. The point in question is, whether an extra-molecule mind, that knows everything *about* all molecules at a given moment could predict — and it certainly can in principle, though not, of course, in reality — whenever mere inorganic events are in question.

From all we have said it comes out that we may restrict our further discussion to the study of life and mind. Here now we quite certainly have evolution before us and this in a double sense: embryological and phylogenetic.

With regard to the former, I may be quite short, as Morgan's theory does not refer to it. I, therefore, should only like to say, that my own vitalism has been founded upon the analysis of embryology, both experimental and logical, and that embryology, in my opinion, is a sort of evolution which, though non-mechanistic is yet not " emergent " in the last resort. For it is determined both by the constellation of matter and by the essence of entelechy. And it would be " predictable " if you knew both. That you cannot predict practically, because you cannot know entelechy before its manifestation, is an all-too-human restriction, but nothing more. A Supermind might predict. This, at least, is a postulate of my vitalism. Now embryology is part of phylogeny, and, for this reason, my embryological vitalism is not the last word on the problem of life as a whole. But as embryological vitalism, as resting upon itself, my vitalism does not know true " emerging " ; in any case it looks upon the morphogenetic events *as if* they were determined in a universal way.

We turn to phylogeny, i.e., to the theory of descent in the broadest sense, including mental phylogeny, and thus we approach Morgan's principal problem in a critical way.

Is phylogeny " emergent evolution " ? That is the question.

And with regard to this very problem it now seems to me as if there were a gap in the conception of the problem on the part of Lloyd Morgan, a gap that relates to the most important point. No doubt " new " things and relations emerge in phylogeny with regard to one who is himself one of its members, namely, man. But is this " emerging " really " emerging " ; i.e., is it emerging for one who stands *outside* the process?

We now see the main point, as I believe. God is the ultimate active source of all; so Morgan tells us. Let us introduce a truly philosophical term for the theological one, let us speak of a *superpersonal phylogenetic entelechy*. The fundamental question, then, is the following: Does this Superentelechy possess an essence, an *essentia,* a suchness, from which the phylogenetic process is the determined necessary consequence, in such a way that this *essentia* is merely transformed from the intensive into the extensive state? Or, is there no such *essentia* or suchness; in other words, is the Superentelechy's *essentia* making itself during the phylogenetic process?

We thus are facing the problem of Bergson's *élan vital* or, what is the same thing, the problem of freedom in its cosmological form. And it seems to me that only a free superpersonal evolution would deserve the predicate of being emergent in the ultimate meaning of the word.

We, of course, take the word " free " and " freedom " in their strict meaning as denoting indeterminism and not in the sense in which Spinoza and Kant have used them, i.e., not in the sense of a determination by the mere essence of the something in question exclusively.[1]

Phylogeny is regarded by us as *one* coherent process, as it is also in Morgan's discussion. Superentelechy or God, to use Morgan's term, is its ultimate source. Is, then, this Superentelechy free in its acting or not? Only in the second case is phylogeny really an emergent evolution; in the first case it is such a sort of evolution only with regard to us.

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[1] In my German works I have called *Wesensgemässheit* what Spinoza and Kant have called freedom.

Morgan, as I have said, does not formulate the problem of determinism quite strictly, though he has seen it, in particular at the end of his work. Is there an " orderly and progressive development "? so he asks; is perhaps emergent evolution taken as a whole a " law of nature "? Is its unpredictableness perhaps nothing but a consequence of " our necessary ignorance of what the further development of a plan will be," every single effect being strictly determinate in accordance " with it "?

Statements like these seem to indicate that Morgan has seen the problem of freedom in an implicit way and it seems to me, though it does not come out quite clearly, that he is inclined to decide in favor of determinism. In this case emergent evolution would be only " emergent " with regard to us who are its parts.

Let us, then, study the problem of cosmological freedom in our own way.

In all empirical questions facts come first. Now there exist two sorts of " facts," which may be said to be of the first and second degree. A fact of the first degree or an immediate fact consists in the statement that a *such* is *now here*. This sort of facts is the primordial source of all our knowledge about empirical reality. Facts of the second degree are generalities induced from facts of the first degree; here belong all so-called laws of nature, may they relate to things or to events, and here belongs also phylogeny. All facts of the second degree have, more or less, an hypothetical accent, as was first seen by Hume. So has the fact of phylogeny; but the accent of probability is very strong here, at least with regard to the existence of a phylogeny in general.

Phylogeny as a fact of the second degree, now, has three characteristics: It is unique, that means that there is but one phylogeny, very hypothetic, of course, in its details. It is, most probably, of the kind of an evolution, and not of a mere summative cumulation, but of an evolution with an unknown end. It is, finally, an evolution of which we are unable to say, whether it has already reached its end or not.

Phylogeny is unique; for there is only one phenomenon of life, the single living individuals standing in material continuity by means of propagation — *omne vivum e vivo.*

Phylogeny is evolution with an unknown end: for it would be very unwise and anthropomorphistic to say that man is its end. There may be many " ends," the totality of which is the " end " proper.

Phylogeny as an evolution may be not yet finished: for who could affirm the contrary?

This then, is phylogeny: a unique evolution with an unknown end and probably unfinished. And this " fact " — of the second degree, as we know — now wants an explanation. We ask: What is at the bottom of it, what is its essential cause?

You will understand without difficulty the general logical aspect of our problem. What we have, i.e., what we know, is a fact in the form of an event, phylogeny; this is regarded as being the consequence of something, and we are in search of the *reason* of this *consequence*. Intentionally I have chosen these rather indifferent purely logical terms. For even if in our case the consequence is an " effect " and the reason a " cause," the primordial relation between consequence and reason is preserved, effect being, so to speak, a " function " of *consequence,* and cause a " function " of *reason.*

Now it is one of the most fundamental principles of the general theory of reasoning, that there is never a universal way from the consequence to the reason, though there exists such a way going from the reason to the consequence or from the negation of the consequence to the negation of the reason. And this principle will prove to be of great importance for us; and not only in a general way, but with particular reference to the problem of cosmological freedom.

Notice well what the " consequence " is, from which we must start, as it alone is given to us: it is phylogeny in the empirical aspect, i.e., unique, with an unknown end, probably still in progression. This " consequence " now might have two very different " reasons " :

First, there might be at its bottom a superentelechy which possesses a fixed essence and does nothing but copy its essence once more into matter, and realize phylogeny in this way. For what would be the consequence of such a process? Exactly what we observe: unique phylogeny with an unknown end and probably unfinished.

But, secondly, there also might be at the bottom of phylogeny a superentelechy without a fixed essence, i.e., with an essence which is making itself during the phylogenetic process. For in this case also the " consequence " would be what we observe, namely: unique phylogeny with an unknown end and probably unfinished.

Two reasons, then, might have as their consequence that which we observe, which we possess: empirical phylogeny as it is. *And we possess no means whatever to decide.*

But this means nothing less than that the problem of cosmological freedom, or if now we like to introduce again Lloyd Morgan's term of *emergent evolution,* in the true sense *cannot be solved.*

We, in fact, have settled our problem by *proving* its insolubleness, just as the problem of squaring the circle has been " settled," though, of course, on quite a different field of our knowledge.

We may believe in emergent evolution in the proper sense, in Bergson's *élan vital,* in his *dieu qui se fait,* i.e., in cosmological indeterminism.

But we may also believe in determinism, i.e., in Spinoza's *substantia* or *natura naturans ex qua sequitur natura naturata.*

Our decision rests upon a belief and will rest upon a belief forever, irrespective of the number of facts still to be discovered. And this depressing conclusion ultimately rests upon the uniqueness of phylogeny: we cannot make experiments with " the phylogeny " as we can with the egg of a frog or a sea urchin. For phylogeny is a " class with but one case," to put it in terms of strict logic; and we cannot stand outside it, for we form parts of it ourselves.

Let me once more come back to embryology. My vitalism has conceived embryology as a determined process, though not as one that is predictable from the material conditions alone. This statement was, however, of the form of a postulate. If, now, we remember that phylogeny is composed of the sum total of all embryologies, we at once discover that our postulate may not be in accord with the truth. On the field of pure embryology we say that the egg produced by an A produces an A. Well, this is true as long as there is no phylogenetic step. But there may be such a step and then the egg produced by an A will produce a B. And this step may be conceived under the aspect of determinism or of freedom.

Let me close my address with a few words on the problem of the freedom of the will, well aware that it does not belong to my proper theme. But willing is also a phenomenon of life in the broader sense and, therefore, if we might discover freedom of willing, this would mean that we have discovered something about the freedom of the process of life, at least on a limited field. I shall, of course, only give a short summary of what I have explained elsewhere in full.

The main thing with regard to the problem of psychological freedom is the fact that the analysis of *willing,* the so-called " phenomenology " of willing, itself does not give us any answer at all, for to possess consciously a will content is a statical phenomenon, a phenomenon of mere " having," and, therefore, does not relate to the problem of freedom, which is dynamic. And moral consciousness in general *may* certainly — I do not say " must " — be conceived as a mere index of the rôle which I have to play in a superpersonal Whole, in a determined way.

The only thing left to us, is the enumeration of a good many single psychological and general biological facts, some of which may be said to be in favor of freedom, some against it, and this in such a way that we have a sort of balance before us, as it were, and are allowed to put a grain now upon the one of its sides and now upon the other.

Upon the side *pro libertate* we may put the fact that without freedom consciousness would be a superfluous world luxury, because in this case all mental becoming would occur in the unconscious sphere; and, besides, the fact that all moral consciousness, in the form of conscience, has such a very strong accent of feeling.

Contra libertatem counts, first, posthypnotic suggestion and, secondly, prophecy, of which more and more well established cases are registered every year.

A decision is impossible.

If there *were* freedom of will, this freedom would, of course, be a mere freedom of saying " yes " or " no " — or, perhaps " no " or not " no " — to the contents of will, which for themselves appear in a determined way before consciousness. In other words: a mere freedom of *admission* is in question, to put it shortly; or, if you prefer to put it in that way, a freedom of stopping.

And this leads us back to our proper subject: emergent evolution. For even if there were such a kind of evolution, i.e., cosmological freedom, this freedom would probably be one of *admission* only. This means that along the line of the phylogenetic process, which is unique, as we know, a great number of possible realizations place themselves before Superentelechy in a way absolutely determined by its essence; and then Superentelechy has the faculty of saying " yes " or " no " — or " no " or not " no " — with regard to their realization, in freedom.

What, then, would this sort of evolution be? It would be half emergent and half non-emergent, as it seems to be. For the Possible would be determined by Superentelechy's essence, whilst the Actual, out of the amount total of the Possible, would be admitted by Superentelechy's free will without any determination whatever. This doctrine resembles to a certain extent the cosmologic theories of Schelling in his last period and of E. Hartmann; with the exception, however, that both these thinkers grant to the Absolute nothing but one act of free admission or non-admission, in the very beginning of things, whilst we have placed such an act before the beginning of each step of the process.

What then, finally, is the truth? We do not know at present and quite certainly shall never know on the foundation of the phylogenetic process taken for itself, for reasons we have explained in full. But it may be that the solution will come some day on psychological grounds — mental life being also a form of life in general. Not, however, on the grounds of normal psychology, but on the field of that science of the future which is called *Psychical Research*, and which, so I am convinced, will one day give us much more important results than we are at the present time even able to imagine. I am happy to be able to say these words in the midst of the town where that great man, William James, so long was at work.

LIFE AND MATTER

H. Wildon Carr
(*London*)

THE most singular thing in the phenomenon of life and its evolution on the surface of this planet is that it is dependent on and wholly conditioned by the energy radiated by the sun. So far as our knowledge of life and its activity in material organization is concerned the earth itself and its constituent elements are a dead thing, merely the stage on which the activity is exercised. The earth does not supply even a part of the energy. Yet the earth itself possesses an abundant, a practically inexhaustible store of energy locked up in its material constitution. Life does not draw upon it, at any rate not immediately, and though in a way it depends upon it yet it does not derive from it its sustenance. So far as life is concerned the earth is dead, inert, — matter, the surface of which is affected by the solar radiation. From the scientific standpoint it is indubitable that the earth is a body of like nature and similar constitution to the sun and must once have formed part of its mass. According to the cosmological theory at present in favor the planetary system is due to a tidal action presumably caused by the near approach of a star when the sun was a giant star of vast dimensions and great diffusion. The gravitational effect of such an approach is calculable and is conjectured to have caused, first protuberances, then the detachment of gaseous masses revolving in orbits round the central mass. All theories of the natural history of the solar system, as well as the tidal theory, are founded on the belief which seems plainly deducible from the facts, that the earth was originally gaseous and incandescent and that its present state is a result of cooling. Living matter has not arisen as a stage in this cooling or by any combination of chemical elements causally dependent on this cooling. It is an independent phenomenon, dependent upon conditions, it is true, but a phenomenon associated with quite minor changes and independent variations taking place on the earth's superficial crust and due to a source of energy outside the earth itself. It appears that it cannot have existed in the form we know before the planet had become practically what it now is, a solid black body with an exposed crust, its surface radiation ended or practically negligible. If during the earth's incandescent state there was life in any form on it, that life must have been a different thing from the phenomenon we know, and differently conditioned. When we calculate the age of the earth we are calculating the period which has elapsed since it became the possible stage of a biological evolution. We are able in various ways to estimate this period and we express it in hundred millions of years. The surface of this cooled-down planet now intercepts a very minute portion of the light and heat radiating in every direction from the still active central sun, and connected with this play of energy we have the phenomenon of the activity of life.

We have, therefore, the very curious fact that life is not something which our mother earth has evolved out of her dying fires or formed by their means; it is a mysterious agency which has appeared only when the planet's own activity had died down and it brings under its direction and control a radiating force emanating from a distant source. The earth is just the stage on which life plays its part, and all the stored energy which the earth provides, coal and oil and running water, are stores of solar energy which life has magazined either automatically or of set purpose.

Life, then, is a phenomenon wholly associated with the stream of solar radiation intercepted by the earth's surface, and yet there is nothing whatever in our scientific knowledge of this radiation to give us the slightest clue to an explanation of its activity. The solar radiation causes a group of surface phenomena on the earth, turns water into vapor, condenses it in clouds, redistributes it in rain, sets up air currents and ocean currents, alters the face of the land, produces climatic and seasonal changes, and all this independently of life. Here and there and now and then the activity of life, as if it availed itself of a watched-for opportunity, taking advantage of a privileged position, diverts to its own purposes infinitesimal portions of this seemingly exhaustless stream. Life plays a rôle very like that of the demon which Clerk Maxwell imagined might be controlling a shutter in the path of the molecules, able without interfering with the actual energy of the molecular movements to reverse the energetical law, to contrive in fact that the water in the kettle on the coal fire shall grow colder while the fire grows hotter. Life seems to perform this kind of miracle. The phenomena of solar radiation are explicable mechanistically, independently of the life and mind which interfere with them in a specific manner.

What is the nature of this interference? Let us look at it from the strictly scientific standpoint. Let us assume that the atomic and molecular systems of the modern physical theory are established beyond any possible disturbance from rational scepticism. Let us suppose that our concepts of atoms and molecules actually represent the physical reality which would appear to us had we heightened powers of perception. These systems are absolutely uninterfered with by life. An atom of oxygen or of hydrogen or of carbon is not affected in any way that we know by the fact that it enters into the structure of a living body. Its physical and chemical nature are the same whether its locus be my blood-stream or a glacier in the Himalayas. Indeed its nature is inviolable whether it be on the earth or in the sun or on Arcturus. The same is true of a molecule. Although the very complex molecules, like the sugars and the starches, are met with only where there are bio-chemical processes, yet the molecules themselves are unaffectd by anything we conceive of as living activity. What then is life? Science cannot represent life in sense-imagery, as it represents atoms or combinations of atoms or atomic activities. Life is not matter and does not create matter, it is activity and it creates agents, and the agents it creates are identical, notwithstanding their individual differences, in the universal nature of their agency. There is something or other, we know not what, and can define it no otherwise than by the vaguest term, activity, which, without having any hold on the material structure itself, uses it in order to procure the exercise of certain definite functions. The why, the how, and the wherefore, science cannot discover, or at least up to the present has failed to discover. Science is rightly suspicious of interpretation by invoking final ends, for their introduction tends to make reasoning circular. It prefers to confine itself to description and to inference based on description; nevertheless it is impossible to dismiss the clear indication that life is purposive, however little insight we may obtain into its purpose. What then is the exact range of its activity? So far as we can see, its activity consists exclusively in making use of the instability of carbon compounds as a means of holding captive the energy of solar radiation and contriving its redistribution. Of the ninety or more elements which chemistry has so far discovered, only one, carbon, appears to have given life its opportunity.

When we reflect on the nature of the activity of life and endeavor by scientific research to elucidate at least the immediate end to which it is directed, we see that it is distinguished from mechanical movement by its functional character. It opposes a certain kind of spirituality to the materiality on which it depends for its actualization. It does much more than impose a particular form on the matter it animates, for what determines the form of all the structures it contrives to produce is always a specific function. Function is the dominant factor; structure is dependent and subservient. It is in this meaning that we are able to say of life that it is an essentially spiritual activity. It is not the expression or manifestation of the infinite variety of the characteristics and qualities inherent in the molecular structure of carbon compounds. Life is not a quality of the stuff we name protoplasm, for protoplasm may be dead, and dead protoplasm, though inert, is chemically identical with live protoplasm, and protoplasm differs from other material combinations in its activity only by the degree of its instability. It is only living protoplasm through which we can track life to its material stronghold. What makes protoplasm live, why when it lives it obeys an impulsion to function in non-uniform ways, we do not know. No analysis of the living cell of a living organism will disclose the practically infinite variety of functions the active protoplasm it contains will on occasion perform. In short, so far as life and living process are concerned, we get no help whatever towards their comprehension by the most exhaustive analysis of the physical and chemical structure of the matter on which life is based. To comprehend life we must study it as a spiritual, i.e., non-material, agency. We must study the functions which living organisms and the living parts of organisms are intended to perform, and the material structures as contrived for and wholly subservient to those functions.

When we concentrate our attention on this aspect of the problem a remarkable contrast at once impresses us: — the contrast between the cosmical evolution of the material universe and the biological evolution of organic structures. Both present to us continuous processes but the direction of the movement underlying each evolutionary process seems the contrary of the other. The material universe presents to the physicist, and to the chemist, the spectacle of a force running down, exhausting itself. For example, modern chemistry has demonstrated scientifically that the element now existing in our planet as lead was at one time uranium or thorium, elements with a high radio-activity. It is variously estimated that the process of degradation of these particular elements in the archaic rocks has occupied from four hundred to four thousand millions of years. Again, when we consider the solar radiation, on which the present habitable condition of our planet depends, we find that astronomers and physicists can calculate in mass-tons per second the weight of that energy. Everywhere in the material universe we see only force running down. Matter is in fact a descending stream of energy the source of which is exhaustible. We have no indication in our whole outlook on the material universe of a reverse movement, or of the possibility of renewing the supply once it has run down.

When we turn to the contemplation of the living evolution the contrast is complete. We have scientific evidence of a continuous progression of living activity extending over perhaps hundreds of millions of years of the recent history of the planet. What is presented to us is an ascent, the evolution of ever more complex organic structures and ever higher spiritual achievement. Again we have no indication of the source nor of what sustains the upspringing of life, but its direction, relatively to the cosmical evolution, is upwards. Man is apparently the last form, the present climax, but man is also the youngest and most recent form to assert predominance. In spirituality, therefore, using the term to indicate the opposite of materiality, there is a reverse direction of the descent of matter, an ascending movement. This direction of biological evolution is even more striking when we consider the scientific evidence that the first forms of life were of excessive simplicity, because there is nothing to indicate why they should have become discontented. What is the appetition which in living beings drives them to seek higher and higher expression? The more we reflect on the scientific facts connected with biological evolution the more clear it becomes that this appetition cannot lie in the individuals of a living species itself, it must lie in the active upspringing of the life which has given the individual existence. While therefore there is no appearance of interaction or parallelism between matter and life, though each is *sui generis,* though both seem independent, there is the remarkable fact that both manifest a definite direction in their activity and that these directions are relatively opposite.

If now we turn from the reflection on the relation of life to matter, in order to reflect on the relation of life to mind, we are at once conscious that we are dealing with concepts which are affiliated to one another and with realities which are not heterogeneous. The reason is not far to seek. Life is active and purposive, matter is inert and mechanistic, and the idea of purpose rests ultimately on a concept of mind. All attempts to give a rational meaning to the idea that mind may be a quality of matter have proved vain. The idea of matter being conscious, as in the theory that the brain thinks, involves a patent self-contradiction, for it combines characters which are mutually and essentially exclusive. Life is consciousness *de jure.* When we speak of the unconsciousness of a living being, or when we describe life by terms such as libido, or will to live, terms which imply unconsciousness, we are using the term unconscious in a purely relative meaning and not in the absolute meaning which we give to the unconsciousness of matter. There is no gulf between life and mind, no gap, no stage in the evolution of living forms at which consciousness first emerges, and no subservient stage at which consciousness becomes self-consciousness. In the same meaning in which the evangelist could say God is a Spirit we can say life is consciousness. What varies is the form of consciousness and the degree to which consciousness may function in specific or individual modes of acting.

Our real difficulty in identifying life and mind is that life is impersonal while mind is always associated with an individual subject of consciousness. Wherever we recognize mind we assume sensations, feelings, thoughts, and actions, which seem empty meaningless terms if no one owns them. For the greatest proportion of living actions are impersonal, all are purposive, but because there is no individual agent to whom we can attribute the purpose we class all impersonal actions as mechanical. Descartes led the way in consistently classing all vital processes as mechanistic, and science has followed him. Thus we make a clear distinction between the vital processes which go on automatically throughout our lives, and over which we exercise practically no direct control, — the processes of respiration, circulation, metabolism, etc., — and the actions which are the result of perception and deliberate contrivance. These latter we attribute to our mind, and consider this mind as a semi-independent reality superposed on our life, not necessarily bound up with its existence, and indeed we tend to endow it with the right to exist in separation from the living body. This may easily be seen to be a false demarcation. The personal mind differs from living process not generically but only as one mode from another of a specific activity.

Consider, for example, a living process in which there is no suggestion of a perceiver perceiving or apperceiving, such as there is in all intelligent actions. When a tree sheds its leaves in autumn, the decay and death of the leaf is not brought about by old age or exhaustion or by buffeting with external forces, and the fall of the leaf is not due to the force of gravity overcoming the force of cohesion. It is due to a living process which bears a close resemblance to deliberate action. The tree itself cuts off the leaf by growing a layer of bark cells at its junction with the stem, thus closing the vessels which connect it with the sap flow and at the same time securing the stem against wound or scar when the leaf is detached. Although trees are individual and the process is carried out independently by every individual tree of a particular species in a specific way as part of its life process, we do not feel compelled to attribute personality and deliberation to the tree. Yet so far as the process itself is concerned what distinguishes it from conscious process? It can only be a modal distinction. To whatever we are to assign the agency it is quite clear that the action belongs to the category of finalism. It is ridiculous to class it under the category of mechanism. We need not suppose that the tree, or anything we may imagine to exist as a mind in the tree, is conscious of what it is doing, but when we say it is unconscious living process we mean by unconsciousness an inhibition of consciousness and not its absence.

It is, however, when we study life in its integrality, when we read its history in the geological record and reconstitute its progressive evolution, that we see that mind is implicit in life and not something new, *sui generis,* imposed upon life or making life subservient to it in the way in which life uses matter. We find in fact that we must draw the fundamental or substantial distinction not where Descartes drew it between thought and extension, classing life under mechanical movement and defining mind as self-consciousness, but between life and matter. The antithesis between these is complete. There is nothing in common between the cosmical evolution of the material universe and the ascent of mind in the biological evolution.

There are many puzzling gaps in the geological record, but there is abundant evidence of absolute continuity. Everything points to the conclusion that life, from its initial and primitive activity and its primordial forms up to its present expression in the actual state of the earth's fauna and flora and human civilization, is one continuous evolution. There is blood-relationship between all the living. Were life only a state of matter or a quality of matter, a stage in cosmical evolution, it would present an entirely different kind of unity or uniformity. Its origin would not be single but multiform. Water, for example, may be conceived as once non-existent and as arising at a particular stage in the process of a cosmical evolution, but we do not account for the identity of its molecular structure by supposing that its chemical emergence occurred at one point of space at one moment of time. We predict, indeed, that water will be formed wherever the constituent elements and necessary conditions of their combination shall be met with. It is entirely different with life.

The evolution of life, as science reconstitutes it, is not an inspiring story. Its outcome in the ascent and domination of man does not thrill us with aesthetic emotion or justify ethical optimism. This may be because our vision is limited or it may be because for some reason, or for no reason, the force is inscrutable. In any case, aesthetic satisfaction, noble ideals, belief in final good, find no spiritual sustenance either in the records of the rocks or in the present state of human society. It is not easy to reconcile the results of scientific research with the moral ideals of mankind. Many forms of life inspire only disgust and many of the means employed by nature (to speak anthropomorphically) to attain her ends seem strangely at variance with our human ideal of fitness. On the other hand the discovery itself of this history is an impressive illustration of man's intellectual grandeur. The mysterious and elusive agency, which man can name, but for the secret of which he searches in vain, has produced a creature who can want to know the secret.

Consider what the story tells us. Take the transformation of vegetable forms. As we go back in the history of the stratified rocks first the angiosperms, the flowering plants which now hold the predominant place in the vegetable world, disappear and the gymnosperms with the allied ginkgos and eucalypti take their place. Then as we go back these disappear and the cycads become the dominant type. These in their turn disappear entirely and we have next the vast flora of the equisetum type and the fern and moss forests of the upper carboniferous period. In the strata next before the most archaic we have gigantic land plants of the simple seaweed type of growth. Thus we have the story of a transformism, for we have no doubt the gaps are only gaps in the record, not from less effective to more efficient types, if we have only to consider adaptation and power of survival, but a continuous creation of new and more complex forms with new and more complex functions which progresses by displacing and replacing the old. We see the same process and the same progress concurrently taking place in the evolution of animal life.

Nature in its objective aspect presents, therefore, to science the spectacle of two great processes in being, a process of cosmic evolution and a process of living evolution. They seem completely independent and the source of each is hidden. From the disinterested standpoint of objective science they are distinguished by their opposition. Matter is inertia, life is activity. To physics and chemistry the matter which constitutes the planetary mass which we are able to submit to scientific analysis is a stage in the degradation of energy. It presents itself as a stable equilibrium of forces in comparatively closed systems, atoms and molecules. It is essentially spatial in the sense that its concept is bound up with the concept of space. To abstract its spatial relations internal and external is to destroy it in everything which is essential to the idea of it. Time enters only into its cosmic evolution as a factor of evolution. This evolution is definite in its direction from motion to quiescence, from activity to inertia, from instability to stability.

Life on the other hand is an ascent. It is not spatial. Space is for living beings their external aspect at any abstract moment of time. Life does not exist in moments, it only presents different aspects at different moments. It is not perduration in time, and its evolution is not a succession of states. Life is continuous creation. It is change, growth, development. It is not a succession of new moments each of which drops the past to enjoy the present; it is the present activity of the past in new creation.

Physicists and biologists are helpless to carry us further. They have no clue to the relation between these two systems of objective phenomena, no interpretation of the opposing principles. Men of science indeed protest that they are not called upon to produce a theory. Their business is with the matter in hand, to describe phenomena and discover the laws of their occurrence. Philosophers for the most part leave science entirely out of their domain, except only so far as its methods need criticism and require interpretation or justification. This is why metaphysics is a necessity of human reason. Even if we believe in the fundamental irrationality of existence we can only support our belief by a metaphysical argument. Let us inquire, then, whether there are in the scientific facts themselves any clues to a metaphysical solution of this opposition.

In the first place we are clearly justified in arguing from the scientific facts of life and matter that in neither case are we dealing with an integral view of reality but in each case with a one-sided aspect. Just as the negative pole of the magnet cannot exist in abstraction from the positive and just as the discovery of the negative charge on the electron requires us to postulate the positive charge on the nucleus, so a degrading movement in cosmical evolution postulates the compensating ascending movement, and an ascending movement in biological evolution postulates a compensating descent.

In the second place our difficulty in regard to the two orders of existence with their opposing principles is to discover any possible way of reconciling them as complementary aspects of a reality integrally conceived. Nothing could be simpler than the natural suggestion that the ascent of life is the complement of the descent of matter and that we have only to fill in the gaps in our knowledge in much the same way as we fill in the gaps in the geological record. Unfortunately the analogy does not hold. The two evolutions bear witness to the fragmentary nature of our knowledge of each, but they move on different planes and the point of contact is not a junction and it is not a union. We are in much the same case as philosophers found themselves in regard to the scientific hypothesis of the circulation of the blood, before Malpighi's microscope had revealed the vessels of the capillary system. The fact that the blood circulated had been practically demonstrated before the mode or mechanism by which it was accomplished had become even conceivable, so that Descartes was led to explain it as an effect of the expansion of fluids when heated and their contraction on cooling. So in science today the striking fact is the inability of physicists and biologists to demonstrate a connecting link between their respective domains, at the same time that every scientific student is profoundly convinced that the universe is a rationally explicable unity.

In the third place there is one character or direction of the two scientific domains which does afford some indication of a possible synthesis between the facts of matter and life. From the side of matter it is clear that, though the cosmic evolution which is held to account for its present state is distinct from the solar radiation which has generated the special conditions connected with the evolution of life, yet this solar radiation is itself a phenomenon of cosmic evolution and the one interpretative principle employed in physics in its whole scheme of cosmic evolution is radio-activity. From the side of life we have also the fact that the principle of individuality is carried very close up to the dimensions of the molecular and atomic systems of physics if indeed it does not reach to them. Microbial life postulates an individual activity of organic structures far below the detection of the supra-microscope. Very few indeed of the bacilli we now suppose to be active in virulent diseases have been seen by even the most delicate instruments of aided vision, yet we have every reason to believe that they function as individuals and reproduce their kind by germs. These germs must approximate very closely to the atomic and molecular mechanistic systems. It is not in microbial forms alone that we find this indifference, so to speak, to the spatial dimensions which receive their norm from the range of our sense organs. The vitamins which we now believe play an essential part in the regulation of vital processes, if they are material structures, are infinitesimal to a degree which defies all ordinary methods of analysis. It is also a curious fact that when it was hoped to find in the chromosomes of the fertilized ovum the material basis of the characters transmitted from the individuals of the old to the individuals of the new generation, it was found that there were not sufficient atoms in the chromosomes to satisfy the requirements of the partition.

The task of metaphysics is, then, to devise a rational scheme by which these two opposite principles, matter and life, shall be brought into unity in one concept. To reduce them to one another, to present life as emerging from matter, or matter as emerging from life, even if it could be conceived as accurate description of actual historical fact, would be no solution, for it would not explain. What our rationalizing human nature demands is an enterprise which will transcend the scientific facts in order to see the true nature of the reality of which they are fragmentary and partial aspects.

THE MEANINGS OF "EMERGENCE" AND ITS MODES

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THERE is an old and persistent tendency in the human mind to conceive of the causal relation as rationally explanatory, and, therefore, to assimilate it, vaguely or explicitly, to the logical relations of inclusion, implication, or equivalence. That " there cannot be more in the effect than there is in the cause " is one of the propositions that men have been readiest to accept as axiomatic; a cause, it has been supposed, does not " account for " its effect, unless the effect is a thing which the eye of reason could somehow discern *in* the cause, upon a sufficiently thorough analysis. This antipathy to the notion of an absolute epigenesis has left its mark deep and wide upon the history of thought; it appears, indeed, at the very outset of Western speculation in the struggles of the physiologers with the supposed difficulty of admitting qualitative change. Two of the later episodes in the history of what may be named the preformationist assumption about causality may pertinently be remembered here.

The first is the doctrine of most mediaeval European metaphysics that all the " perfections," or positive attributes, of the creatures must be possessed by the First Cause — even though it was found necessary to assert with equal emphasis that that Cause and its creatures have no attributes in common. In this theological form the preformationist principle implied an addition to the empirically known sum of reality; it left undiminished the abundance and diversity of nature and did not exclude quantitative and qualitative change from the natural order, but placed behind these a supersensible cause in which all this abundance and diversity were declared to be in some fashion antecedently or eternally contained. Since this way of construing the assumption meant no simplification of the universe for our understanding, it was not serviceable to natural science. But in the seventeenth century there began to develop a conception which, while it fulfilled the same assumption, did so in a significantly different way — the conception, namely, of natural events as combinations or rearrangements of relatively simple, preëxistent entities, of which the total number or quantity remains invariant, and of each of which the qualities and laws of action remain the same through all the combinations into which it may enter. By this mechanistic conception of causation there is nothing *substantive* in the consequent which was not in the antecedent, and the supposed paradox of epigenesis is thus avoided. But in this second form the preformationist assumption implied a program of reduction or simplification; it was in its essence a scheme for abating the difference of things. For if complexes contain nothing (except their patterns) not already in their simple components, *rerum cognoscere causas* means learning to see in the complex nothing but its beggarly elements — the meager qualities and limited repertoire of the simple, merely multiplied a certain number of times. Scientific explanation becomes equivalent to mathematical analysis; and if the method is universalized, all philosophy, in Hobbes's phrase, becomes "nothing but addition and substraction." But many complex things have properties not convincingly describable as multiples of the properties of the simple things through the combination of which they arise; and thus the notion of observed causal processes as rearrangements of the unchanging, while formally denying that there is "more" in the effect than there is in the cause, nevertheless seemed to imply that there is less in the cause than is apprehended in the effect. The mechanistic conception escaped this paradox only through its conjunction with another feature of most seventeenth-century and subsequent philosophy; its plausibility at the outset and ever since has been wholly dependent upon its association with some form of psycho-physical dualism. By means of this all that considerable part of the data of experience, together with the phenomenon of experiencing itself, which seemed plainly irreconcilable with the principle of quantitative and qualitative constancy could conveniently be assigned to the side of the "merely subjective." The eventual triumphs of that principle in modern science were made possible through the restriction of its literal application to the physical order, after that order had first been carefully purged of the classes of facts most recalcitrant to such application.

I have recalled these historical commonplaces because they lead up to the first of a series of distinctions which I wish to propose. The phrasing of the question laid down for our discussion implies, and most judicious readers of recent English and American philosophy, I suspect, feel, that the now modish terms "emergence" and "emergent evolution" stand in some need of clarification. In current use their meanings are various and usually vague; and though it may be recognized that they point towards some real and important philosophical issues, the precise nature of those issues, their relations to one another, and the logical procedure suitable for dealing with them have not yet, perhaps, been formulated quite so clearly and methodically as could be wished. It is, therefore, towards such preliminary definition, discrimination, and correlation of problems that I shall chiefly attempt to contribute. While some opinions on certain of the issues themselves will be expressed, it must be with the brevity that is indistinguishable from dogmatism; and the primary purpose of this paper is merely to offer some prolegomena to any future discussion of " emergence."

What is needed, however, is not an extreme narrowing of the signification of the general term. In this case, as often in philosophical terminology, it is better to leave to the generic term a meaning so broad as to appear vague, and to approach precise definitions and clear-cut issues by progressively distinguishing species within the genus. " Emergence," then (or " epigenesis," which would be a much more appropriate word), may be taken loosely to signify any augmentative or transmutative event, any process in which there appear effects that, in some one or more of several ways yet to be specified, fail to conform to the maxim that " there cannot be in the consequent anything more than, or different in nature from, that which was in the antecedent." And the first distinction which it is essential to make, in reducing this vague general notion to something more definite and discussable, is between what I shall call the theses of the possibility of general and the actuality of specific emergence, theses antithetic respectively to the first and second sorts of preformationism.[1] To affirm the possibility of general emergence is to reject the preformationist assumption formally and absolutely, and therefore to deny the validity of any argument from it to the existence of a metempirical cause or causes which somehow pre-contain " all that is in the effects." But to many this assumption apparently still has the force of an axiom, and the argument in question, therefore, figures conspicuously in some recent discussions of our theme. Thus Taylor repeats the scholastic maxim: " The principle *e nihilo nihil fit*," he writes, " is fundamental to all explanation " ; and it is therefore " true that no cause can contribute to its effect what it has not to give. The full and ultimate cause of every effect in a process of evolution will have to be found not simply in the special character of its recognized antecedents but in the character of the eternal which is at the back of all development. And this must contain " — though " in a more eminent manner " — " all that it bestows, though it may contain much more." [2] Boodin has recently built a highly original superstructure upon the same ancient foundation; for the main argument of his interesting volume on *Cosmic Evolution* appears to be, in brief, that philosophy must " explain " the seeming emergence of novelty in the course of evolution, that " causality from behind cannot account for more than there is in the antecedents," and that therefore the higher forms of being which are progressively attained in terrestrial history must have preëxisted in, and been communicated through ready-made " energy-patterns " from, some other part of the universe, — the " evolution of new levels " being " obviously " impossible, since it would be tantamount to " something coming from nothing." [3]

The issue here is not only the most fundamental one in our topic but one of the crucial issues in all philosophy. If we really know that an absolute or general emergence is impossible we know something very curious and important about the universe. But the proof of its impossibility usually offered I find unconvincing for numerous reasons, of which a few may be briefly indicated. The universal cause or set of causes in which all that is in the (temporal) effects is declared to be pre-contained must be one of three things: a temporal *prius,* or an eternal which contains the temporal effects as its parts, or an eternal extraneous to those effects. If taken in the first of these senses, the assumption on which the argument rests cannot, of course, mean that the effects themselves are in the cause; it can only mean either (a) that the effects collectively do not *differ* either qualitatively or quantitatively from the *prius* — that is to say, that they are either mere repetitions of it, or else that they differ only in some relational property which is regarded as unimportant, such as the arrangement or distribution of the qualities and components present in the cause; or (b) that they are never of higher metaphysical rank or excellence than the cause. This latter is what the supposed axiom seems often to reduce to; the " lower " we are told, can come from the " higher," but not the " higher " from the " lower " ; the stream of being cannot rise higher than its source. But — though this will seem to some a hard saying — neither of these forms of the preformationist assumption appears to be justified by anything better than a prejudice — an idol of the tribe, at best. The supposed axiom lacks self-evidence, and though there are some, there are no cogent, reasons for postulating it. Concerning the qualitative and quantitative relations of two existents of different dates we have no *a priori* knowledge. It is entirely conceivable that temporal reality as a whole is not only augmented, but attains higher levels, within any finite time which we may choose to consider; and there are some to whom this evidently seems the more satisfying thing to postulate. Certainly, if consistently carried out, metaphysical preformationism has less edifying and cheering implications than are sometimes attributed to it. If the sum of being and the sum of realized value are constant — and unless they are either constant or diminishing the pretended axiom is false, and there *is* at times an absolute emergence — then the whole movement and travail of the creation is but a barren shuffling-about of the same pieces; an increase or ascent in one region must be simultaneously compensated by an equivalent decrease or decline elsewhere; the more the universe changes, the more it is the same thing. If, however, the "Cause" is conceived as a supratemporal totality which contains the temporal effects, the impossibility of general emergence undeniably follows; an "eternal" cannot grow or improve. But such a conception implies the true inclusion of a real succession in a *totum simul;* and no ingenuity has ever succeeded in showing this to be other than a self-contradiction. This aside, since the temporal world is still admitted to be in some sense real, the whole of *that* world may in that same sense conceivably differ at different moments in the number of its elements or in their value. Finally, if the Cause by which "all that is in the effects" is said to be possessed is conceived as an eternal that does *not* contain those effects within its being — which I take to be the orthodox scholastic view — the same difficulties present themselves as in the first case, together with some additional ones. The notion of an existent which at once is alien to all succession or change, and yet is the efficient cause of a series of temporal changes, is, to say the least, elusive; and the supposition that that cause must "possess" all that is in the temporal effects seems not only gratuitous — the same venerable prejudice as before — but also self-contradictory. None of their *distinctive* qualities can be predicable of it, except in a sense so eminent as to be no sense at all. And even if the qualities were the same, their "communication" to the effects would mean the emergence of additional existent *instances* of those qualities, unless they were at the same time lost by the Cause. And in any case, there is nothing in this last form of the argument which would preclude emergence in the world in which alone, by hypothesis, change occurs at all.

There is, then, no valid *a priori* argument against the possibility of general (which, of course, does not necessarily mean perpetual) emergence to be drawn from the notion of causality. The subject is one on which we have no means of arriving at objective conclusions, unless it be through more or less probable inferences from experience. It may be suggested that reasons for regarding general emergence as impossible (or meaningless) are to be found in the experimental data upon which the special theory of relativity is based. An examination of the sufficiency of those data as grounds for such a conclusion cannot be attempted in the time at my disposal.

The thesis of specific emergence means denial of the second form of preformationism; it is the assertion on empirical grounds of the occurrence, among the phenomena investigable by science, of events which are not mere rearrangements of preëxistent natural entities in accordance with laws identical for all arrangements of those entities. It is to be observed that the reality of specific emergence is usually asserted by those who declare general or absolute emergence to be inconceivable. This combination of views is, at least on the face of it, logically possible, since the denial of qualitative and quantitative constancy in certain empirically observable changes does not of itself forbid the supposition of an ulterior general cause of whose relation to the entire series of changes the supposed axiom about causality would hold good; and the combination is natural, because there is a radical incompatibility of temper between the two types of preformationism. On the other hand, if such a compensatory general cause is excluded, any instance of specific emergence, however slight, would obviously imply also general emergence, an augmentation of the total sum of things. The opposition in certain scientific quarters to current doctrines of specific emergence seems to be due in no small part to the same feeling as is expressed in the scholastic principle — the feeling that there would be something queer and illogical about a universe in which substantive increments popped into existence. The chief significance of our problem is, then, that it raises definitely the question of the tenability of this historic assumption, common to and potent in both traditional theology and mechanistic science, in spite of their mutual antipathy.

Agreeing in what they deny, doctrines of specific emergence may differ in two respects in what they affirm: in their accounts, namely, of the occasions of emergence, and of the types of actual emergents. In the first regard we must first of all distinguish between indeterminist and determinist theories. The former declare that there are instances of emergence which are reducible to no causal law; no fixed occasions can be formulated upon which they invariably occur. The hypothesis of "undetermined evolution" to which Professor Driesch has referred is, I take it, a theory of this sort; but it is undesirable to define this as the only or the "strict" sense of "emergent evolution." The determinist kind of theory declares that whenever certain specific occasions appear a specific variety of emergent uniformly arises. The general nature of these occasions may be variously conceived. One abstractly possible sort would consist merely in intervals in the proper time of one or another physical system; but the most widely current hypothesis on the matter — the so-called theory of creative synthesis — finds the chief, if not the only, occasions of emergence to consist in the formation of special integrations of matter and (or) energy. The question what, in fact, these occasions are, must, of course, depend upon the character of the emergents which can be shown really to arise. Before raising this question of fact it is useful to consider what types of emergent there conceivably *may* be — what, in other words, are the ways in which it is possible to think of a consequent as differing positively, otherwise than in the rearrangement of the same elements, from its causally necessary antecedent. In distinguishing these modes of possible emergence I shall — in order to gain brevity by combining two definitions — put the enumeration in the form of a statement of the meaning of "emergent evolution," that term in general here signifying the occurrence as a feature of the evolutionary process of *any* of the modes of emergence. An "emergent evolution" may, then, be said to have taken place if, upon comparison of the present phase (called Ph. N), of earth-history (say that since the appearance of *homo sapiens*) with any prior phase (called Ph. A), there can be shown to be present in Ph. N any one or more of the five following features lacking in Ph. A. (1) Instances of some general type of change admittedly common to both phases (e.g., relative motion of particles), of which instances the manner or conditions of occurrence could not be described in terms of, nor predicted from, the laws which would have been sufficient for the description and (given the requisite determination of the variables) the prediction of all changes of that type occurring in Ph. A. Of this evolutionary emergence of laws one, though not the only conceivable, occasion would be the production, in accordance with one set of laws, of new local integrations of matter, the motions of which, and therefore of their component particles, would thereupon conform to vector, i.e., directional, laws emergent in the sense defined. This first mode differs from the others in that it implies no quantitative variability of the prime or irreducible *existents* (other than relations) in the system under consideration. (2) New qualities and, especially, classes of qualities (e.g., the so-called secondary qualities) attachable as adjectives to entities already present, though without those accidents, in Ph. A. (3) Particular entities *not* possessing all the essential attributes characteristic of those found in Ph. A, and having distinctive types of attributes (not merely configurational) of their own. (4) Some type or types of event or process irreducibly different in kind from any occurring in Ph. A. (5) A greater quantity, or number of instances, not explicable by transfer from outside the system, of any one or more types of prime entity common to both phases.

In the enumeration of types of possible emergence included in this definition, the most significant point is the contrast between the first, which may be called functional, and the remaining four, which may be called existential, emergence. Several writers have recently declared that any attempt to prove the reality of the first mode is subject (for familiar reasons, inherent in the notion of a "law," which need not be recalled here) to an intrinsic logical limitation. Our inability, they remark, at any given time to discover, or even conceive of the general nature of, any single law or set of joint laws from which all the motions of matter in its differing integrations would be deducible, is not conclusive proof that no such law is formulable; "within the physical realm it always remains logically possible," Broad has said, "that the appearance of emergent laws is due to our imperfect knowledge of microscopic structure or to mathematical incompetence." This *non possumus* does not seem to me to be itself conclusively established; but as there is no time to give reasons, I shall not here challenge it. Even supposing it true, it would not follow that the emergence of laws can be said to be improbable. Such emergence would, to be sure, imply the impossibility of a complete unification of science; and there is for this reason, we are often told, a decisive methodological presumption against it. But here we must distinguish between heuristic rules and propositions of fact. It is the business of the scientific investigator to look for identities of law in seemingly diverse phenomena, and to find as many of them as he can; it is not the business of the philosopher to assume *a priori* that nature must to an indefinite degree lend itself to the gratification of this ambition. Though rigorous and conclusive proof of the first mode of emergence be impossible, the hypothesis of its occurrence seems to me to be patently the more probable in the present state of our knowledge. But with these cursory dogmatizings I leave to others the question of functional emergence, in order to consider somewhat less summarily that of existential emergence.

Concerning this the first thing to remark is that an attempt to prove it is not subject to the same general logical disability said to inhere in any argument for emergent laws. An existential emergent would be a quality, or a thing or event possessing distinctive nonconfigurational qualities, which was found in the subsequent and not in the prior phase of some causal process; and its presence in the one case and absence in the other would be facts determinable either by observation or by inference from observed data. Where observation of both phases is possible the proof of existential emergence can be direct and virtually complete, as in the case of the qualitative changes (whether they be "objective" or "subjective") incident to chemical synthesis, which have long been recognized, under a different terminology, as examples of such emergence. This simplest instance — which, however, is not quite so simple logically as it looks — obvious and commonplace though it is, has a crucial importance which some writers on the subject do not appear to realize; for it alone suffices to show that there can be no general and decisive theoretical presumption against *other* hypotheses of existential emergence, that nature is assuredly no affair of mere rearrangements. In less simple but philosophically more consequential and controversial cases, the argument for existential emergence may involve somewhat complex and difficult reasonings, and therefore attain a less high degree of probability; but even in these cases, to which I shall shortly return, the difficulty is of a kind different from, and less fundamental than, that said to infect all reasonings concerning emergence of laws.

With the distinction between functional and existential emergents in mind we are also in a position to deal with the commonest general or antecedent objection brought against theories of specific emergence. The objection was raised, in differing terms, by several participants in the recent discussion of the subject by the English philosophical societies. To characterize an effect as "emergent," it is urged, is to give up the attempt to "explain" it; and since science cannot give up this attempt, the characterization can have, at best, no more than a provisional validity, as a way of admitting that certain things have not as yet been completely "explained." Now, what sort of explanation is it that these critics desiderate in theories of emergence? "Causal explanation" in the empirical sense — the assumption that every event follows upon some other *nach einer Regel*, the " determinism of the experimentalist " — is, as we have seen, entirely compatible with the belief in emergence. The sort of explanation which specific emergence, or emergent evolution, would exclude, is simply that demanded by the second form of preformationism — the conception of an event as *neither* (a) manifesting any law, or mode of uniform behavior, *nor* (b) containing any existent, not found in the antecedent phase of the sequence to which it belongs. To maintain then, that everything is " explicable," in the sense incongruous with emergence, is to raise a definite, though by no means simple, question of fact; it is to imply, for example, that, barring mere summations or rearrangements, there is to be found in the present phase of terrestrial history no existence whatever — no quality, type of entity, or kind of process — which could not already have been discerned by a scientific angel observing the cold-gaseous-nebula stage of the development of our solar system. This proposition cannot be said to have a high degree of *prima facie* plausibility; and its truth cannot be assumed *a priori* merely because it is one of the two conceivable ways of satisfying the demand for a special type of so-called " explanation " which is not practically indispensable to science.

Wholesale attempts to rule out, *ab initio,* all specific hypotheses of existential emergence by *a priori* assumptions of this sort being excluded, both assertors and deniers of any such hypotheses must address themselves to the analysis of definite empirical data. The assertor must (if the question be that of emergent evolution) point out some type of observable entity, event, or quality — call it E — existent in Ph. N which does not appear to be adequately describable in the same terms as would describe any entity, event, etc., which we can with probability suppose to have existed in Ph. A. The denier must attempt to show that everything in E *is* describable in the same terms as some class of entities, events, or qualities in Ph. A; to this end he may employ either of two methods, which may be termed the reductive and the retrotensive; i.e., he may either (1) seek by analysis to reduce E to the same descriptive terms as are sufficient for certain events, etc., admittedly found in Ph. A; or (2) admitting that E has the characters attributed to it by the assertor of emergence, he may maintain that these characters were already present in the earlier phase — in other words, must be supposed to be present in all phases — of the process.

The general logical nature of the problem being thus formulated, we may consider a particular hypothesis of existential emergence, which I hold to be true. It is nowise original, being substantially the same as the theory to which Broad has given the name of "emergent materialism" — though that designation seems to me a veritable *lucus a non lucendo*. According to this hypothesis, both the third and fourth modes of emergence — i.e., emergence of new types of entities and of new kinds of event or process — have appeared in evolution, in the form, but only in the form, of what may be called "trans-physical" emergence. By this I mean the production, as effects of the formation of certain complex and late-evolved integrations of living matter, when acted upon by certain forms of radiant energy, of psychical events and psychical objects. An example of a psychical event is an act of awareness. By psychical objects I mean individual entities empirically existent, having extension and certain other of the properties commonly called psychical, but differing from true physical objects in that they do not conform to the laws of physics, have individually only an ephemeral existence, have collectively no quantitative or numerical constancy, have no direct dynamical relations with one another, and are grouped into "private" sets, i.e., each is accessible only to an act of awareness of an individual organism. Examples of such entities are sensa and images, both delusive and veridical. In other words the "generative theory of sensa," recently defended by a number of writers, is a part of the hypothesis of existential emergent evolution I am presenting. The initial cases of trans-physical emergence were followed by a further evolution of the same type, conditioned upon the formation of new and still more complex integrations of matter and (or) energy, and the process thus far apparently culminates in the cognitive and affective functions of the human organism.

To the plain man, and to some men of science, these theses will, I dare say, seem rather obvious, and not much in need of defence. But in philosophy they manifestly raise numerous highly controversial issues. The existential emergence they assert is attacked chiefly from two sides, and by the two methods already defined; the reductive method is at present represented by behaviorism,[4] the retrotensive mainly by pan-psychism, or the mind-stuff theory. The behavioristic argument I shall not here examine; the view that both the act and the content of awareness, when I apprehend an object distant in space or time, are adequately describable as present changes of the relative position of molecules under my skin, really seems to me to be itself adequately describable by Broad's epithet, "silly." There is, however, an important contemporary doctrine which would apply the reductive method to the immediate objects of awareness, but not to the act of awareness; the former, it declares, are simply parts of the physical world, and, if emergent at all, are at any rate not trans-physical emergents. This contention is assuredly deserving of serious discussion; but the reasons for rejecting it are too complex to be presented here. The attempts of pan-psychists to escape from the admission of trans-physical emergence seem plainly to be due, in part, to the influence of an attenuated, vestigial form of the ancient pseudo-axiom mentioned at the outset; while it is not necessarily maintained by them that specific emergence is impossible in principle or non-existent in fact. They apparently feel that a causal antecedent cannot be so *very* different in nature from its effect as a physical event is from a mental one. Thus the author of a recent admirably lucid defence of the mind-stuff theory remarks that " discontinuity in evolution would be a baffling and unintelligible phenomenon," and declared that the mind-stuff theory alone " gives us a universe without such unintelligible breaches." " If a mind is simply a brain regarded from the outside, . . . the gradual evolution of a brain *is* the gradual evolution of a mind " ; thus " there is no need to postulate any discontinuity in evolution to account for the appearance upon the scene of minds, of consciousness, of qualities." Yet the same writer tells us that " the units " of mind-stuff " which make up our mental states " and also our brains " are not *aware* of anything — neither of anything else nor of themselves. They just *exist;* . . . the fact of their constituting a group of units that function together, or the fact of their being in such and such a position in space and time, is a fact about them, not an aspect of their psychic being." Nor do they possess any of (at least) the secondary qualities. It is only when, " as a product of organic evolution," brains are formed, that " awareness," and therewith qualities, make their appearance.[5] This, however, is to strain at an emergent gnat and swallow an emergent camel. The cognition of external objects and their relations, which is somehow achieved through the brain, is not the sum of the atomic, non-cognitive sentiencies supposed to inhere in its component particles; and it is therefore no more " accounted for " by the assumed sentiency of those particles than it is by their motion. It is as blankly different and discontinuous a new fact as anything could be. So little, at best, can be accomplished by the retrotensive method that it is not surprising to find in some recent pan-psychism a tendency to invoke the aid of the reductive, i.e., to describe the *higher* mental functions in somewhat vaguely behavioristic terms. But behaviorism does not, by becoming vaguer, become more convincing.

Another attempt to employ the retrotensive method for avoiding the admission of trans-physical emergence is to be seen in the parallelistic form of emergent evolutionism, the view that psychophysical " duality of nature does not *arise* in the course of evolutionary advance, it is there *ab initio*," but that emergence occurs (in just what modes is not very clear) in the psychical as well as the physical sense, though in each independently. Such a view, however, appears to involve the general doctrine, at once confused and incredible, that physical events can have no causal relation to mental ones — which implies that sensations are not due to physical stimuli, and that if a man, after receiving a blow on the head, loses his memory, the blow is wholly irrelevant to the amnesia, which is causally explicable, if at all, solely by the thoughts he was thinking before he was hit. This doctrine does not appear to me to lie within the bounds of serious discussion. The retrotensive method, therefore, not only gratuitously extends to the whole of nature a concomitance for which there is probable evidence only in a special class of cases; it also either falls short of its objective or else implies impossible consequences.

We have, therefore, abundant reason to believe that in the history of our planet there have occurred genuine new births of time, a sheer increase and diversification and enrichment of the sum of things here. And no reason, except an arbitrary pseudo-axiom, can be given for assuming that this has been merely a cosmical game of beggar-my-neighbor. On the other hand, we have no empirical reasons for asserting — and serious reasons for doubting — that a similar process is the general rule throughout the physical universe, or that the higher emergents occur at all frequently in space and time. Yet, even though no knowledge which we possess concerning evolution justifies that generalized or cosmic meliorism which now so widely does duty for a religion, there nevertheless lies before our terrestrial race in its own little corner of the world a future which, if dim with uncertainties and beset with perils, is not necessarily devoid of possibilities immeasurably transcending all that the past has brought forth. There perhaps yet remain to mankind, we are told, some thousand million years; if it be so, before this long day ends it is possible that, besides all that man's laboring reason may achieve, there may yet emerge out of the latent generative potencies of matter, as there quite certainly have emerged before our strange planetary history, new and richer forms of being, such as no prescience of ours could foresee and no contrivance of ours create.

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[1] The adjectives "general" and "specific" are not free from ambiguity; the former here means "predicable of the whole, but not necessarily of every part," the latter, "predicable of some part or parts, but not necessarily of the whole."

[2] A. E. Taylor in *Evolution in the Light of Modern Knowledge*, (1925), p. 460.

[3] J. E. Boodin, *op. cit.*, (1925), pp. 44, 67, 82, 96–98, 101 and *passim*.

[4] A behaviorist might without inconsistency admit functional while denying existential emergence.

[5] Drake, *Mind and Its Place in Nature*, (1926), pp. 241–243, 97–100.

EMERGENT EVOLUTION OF THE SOCIAL

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WHEN our thinking tends to congeal into two conflicting interpretations we naturally either devote our days to showing why the one must be true and the other false or we seek to escape from both by adopting a new position from which we can view each of the alternatives as a mixture of truth and falsehood. The theory of "emergent evolution" (Morgan), also called "evolutionary naturalism" (Sellars), "creative synthesis" (Spaulding), "emergent vitalism" (Broad), and "organicism" (L. J. Henderson), is an example of the latter tendency since it is an endeavor to avoid the "nothing but" attitude of naturalism *versus* supernaturalism, determinism *versus* freedom, continuity *versus* discontinuity, mechanism *versus* vitalism, the many *versus* the one. It corresponds in philosophy to the resolution of the more special conflict between preformation and epigenesis in embryology. Experimentation on the development of living and study of the phylogeny of living and extinct organisms have demonstrated that there is both genetic continuity and discontinuity, or the production of novelty in organisms, in other words, that evolution is not only a repetitive but also a creative process. With the increasing tendency to extend the concept of organization, in the sense of the French "agencement," also to the physical, chemical, psychological, and social domains, there arises a strong probability that the various antitheses above mentioned may be resolved in somewhat the same manner as they have been in biology.

But this is all somewhat vague. A more specific statement, applicable to each empirical instance of novelty has been formulated by the American and British realists, Holt, Spaulding, Sellars, Alexander, C. Lloyd Morgan, H. C. Brown, Conger, Jennings, Gordon, C. K. Ogden, Broad, and G. H. Parker, who maintain that the unique qualitative character of organic wholes is due to the peculiar non-additive relations or interactions among their parts. In other words, the whole is not merely a sum, or resultant, but also an emergent novelty, or creative synthesis. This conception was long ago advanced by J. S. Mill, G. H. Lewes, and Wundt, and since the various sciences are concerned with the investigation of wholes of different degrees of complexity, it is, perhaps, implicit in Comte's hierarchy of the sciences, to which we still adhere, and in our various chemical and biological classifications. According to Spaulding, "*certain specific relations,* recognized, named, and *technically formulated in special sciences, organize* parts into wholes, and there are states of affairs resulting [we should now say "emerging"] that are identical with new properties, and that are different and distinct from the individual parts and their properties. Therefore the *reduction* of these new properties to those of the parts *in the sense of identification,* and the finding of a *causal determination* also in this same sense is *impossible.* The properties of the whole are, at least some of them, new, and in just this respect *are a 'law unto themselves'* and *in this sense free.* This does not mean that they are lawless, but only that their specific principles of 'behavior' are not identical with those of the parts."[1] And, paraphrasing the dictum that to be determined by one's own nature is to be free, he adds, "*Freedom consists, therefore, of action in accordance with those characteristics which subsist at a certain level of organization* but do not exist at other (lower) levels, yet is quite compatible with law and determination both at this higher level and at lower levels. Freedom of this kind subsists *at each level* of reality in the universe, not only in the mental but also through the physical and the merely subsistent realms." It is perhaps unnecessary to point to the essential similarity between emergence as thus understood and the *Gestalt* of the configurationists, Wertheimer, Koehler, Koffka, Drexler, and others.

There is evidently danger of conceiving the emergents in a fashion too schematic, too rigid, and too static. The whole constituted by the organized and integrated parts need not be regarded as novel in its entirety. The novelty is variable and may appear only in certain functional aspects of the whole. Since wholes have a manifest cumulative tendency to combine and recombine to form ever more complicated wholes, the ascending hierarchy of emergents has been much stressed. It is far from being universal, however. By loss or simplification of parts or suspension of some of their interactions, there is also an " Abbau," or unbuilding, productive of simpler emergents. This is clearly seen in the many recessive mutations of plants and animals and in the numerous secondary simplifications of such forms as parasites and other highly specialized organisms which are demonstrably descended from more complicated and nevertheless more primitive and generalized ancestors. There is, therefore, an evolution by atrophy as well as an evolution by increasing complication, and both processes may be going on simultaneously and at varying rates in the same organism. We must also remember that most authors artificially isolate the emergent whole and fail to emphasize the fact that its parts have important relations not only with one another but also with the environment and that these external relations may contribute effectively towards producing both the whole and its novelty. This tendency to abstraction has lead Professor H. C. Brown to remark that " the whole is then physically more than the sum of the parts *we have taken account of,* although these may be legitimately abstracted as sufficient for correlation with the consequences of the integration. The extraordinary sense of mystery some seem to feel about the process seems to me to arise from forgetting this interstitial filling that is as real as the selected elements and renders technically false the literal interpretation of the appealing paradox of the whole that is something more than the sum of its parts."

If all wholes of which the parts are organized, or exhibit those relations which we call integration, differentiation, interactive accumulation, etc., among themselves and with the environment, are emergents, we must agree with Morgan that " it is beyond the wit of man to number the instances of emergence." Since no two events are identical, every atom, molecule, organism, personality, and society is an emergent and, at least to some extent, a novelty. And these emergents are concatenated in such a way as to form vast ramifying systems, only certain ideal sections of which seem to have elicited the attention of philosophers, owing to their avowedly anthropocentric and anthropodoxic interests. These sections have been called levels. The word is not very apt since it conveys a spatial and static metaphor, whereas emergents must be regarded as intensively manifold spatiotemporal events. Naturally no two authors agree in their lists of levels. Metaphysicians and epistemologists like Alexander and Morgan are mainly interested in space-time, matter, life, mind, and deity as successive emergent levels. To the biochemist, biophysicist, biologist, and physiological psychologist, however, life and mind are so amazingly complex and comprise so many heterogeneous processes that their blanket designation as two emergent levels cannot seem very illuminating, and to the observer who contemplates the profuse and unabated emergence of idiots, morons, lunatics, criminals, and parasites in our midst, Alexander's prospect of the emergence of deity is about as imminent as the Greek kalends.

Our knowledge of organisms and their development will hardly permit us to accept such levels as life and mind as having been established *uno ictu*. Emergence must be more ambulatory, or at any rate less saltatory. If the naturalist is to accept both genetic continuity and novelty in evolution, the viable novelty at each emergence must be very small indeed.[2] This is attested both by the extraordinary slowness of phylogeny and the very subtle transitions in even the most rapid ontogenies. Even metamorphosis in organisms is only superficially saltatory. Novelties such as life and mind, conceived in wholesale fashion, are of such magnitude that we can regard them only as representing the final accumulative stages of very long series of minimal emergences. The insistence on levels becomes, therefore, largely a matter of descriptive emphasis and should not conceal the necessity for detailed scientific knowledge of every emergence and the peculiar constellations and interactions of the parts which immediately determine it.

One of the levels in which the situation, as it appears to me, is most open to investigation, is the social. Unfortunately the subject has been passed over by writers on levels with only a few vague remarks. Unfortunately, also, the science of comparative sociology has remained undeveloped. It has, in fact, fallen between two stools, because the sociologists have left the study of animal and plant societies to the biologists and the latter have been much less interested in these societies as such than in the structure and individual activities of their members. Apart from Forel and myself only a few investigators, like Espinas, Waxweiler, Petrucci, and Deegener, have evinced a keen interest in nonhuman societies. Yet these, no less than human society, are as superorganisms obviously true emergents, in which whole organisms function as the interacting determining parts. Owing, moreover, to the comparatively loose and primitive character of the integration and the size of the components even in the densest societies, it is possible to ascertain the behavior of the parts and to experiment with them more extensively than with chemical and organismal wholes, since the parts of the latter are either microscopic or ultramicroscopic and are always so compactly integrated that analysis becomes very difficult and involves a considerable amount of statistical inference. Experiments in subdividing, compounding, castrating, and grafting, and in introducing foreign elements with a view to observing their effects on animal and plant societies as emergent wholes, can be carried far beyond the limits of such experiments on the single living organism. For this reason, for the reason that there is a much greater wealth of emergents at the animal social level than is commonly supposed, and because the peculiarities of social emergence bear an interesting analogy to those of mind, you will pardon me if I descend to a rapid review of a number of biosociological details.

Social aggregates — if we employ the term "social" in its broadest sense — may be divided into two great groups, the heterogeneous and the homogeneous, the former comprising the associations of organisms belonging to different species, the latter of individuals of the same species and therefore of common genetic origin. In either group the simplest association obviously obtains between two interacting individuals, the combined behavior of which may be said to form an emergent pattern different from, though depending on, the functional peculiarities of the two component organisms. Among the heterogeneous associations we can distinguish the innumerable cases of predatism, parasitism, symbiosis, and biocoenosis, which constitute a vast series of emergents varying from those of very low to those of very high integration. In predatism the predator becomes structurally and behavioristically adapted to the prey and the latter to the predator, at least to the extent of modifying its habits of flight, concealment, defence, or fecundity. In these cases we can hardly speak of association in the social sense, but it may be noted that if the predatory species indulges in too great an extermination of the prey, it must either adapt itself to some other form of prey or automatically cease to exist. In parasitism this danger is the greater because the association of host and parasite is so close as to be usually one of actual bodily contact. Moreover, the parasitic association which is exhibited, either temporarily or permanently, by many thousands of animal and plant species, tends to ever greater definiteness through the selection of specific hosts by the parasites. This type of association is unilaterally aggressive like predatism, but tends in turn to lapse into a relation of mutualism, or symbiosis between the interacting individuals, again giving rise to innumerable emergents exhibiting such diverse behavioristic wholes as the helotism of alga and fungus in the lichens, the association of bacteria or *Micorrhiza* with the roots of higher plants, the singular associations of pollinating insects with flowers, between the yeasts or bacteria and the tissues of Homopterous and other insects, and including the phenomena of luminescence, between ants and certain tropical trees and shrubs, the cultivation of fungi by beetles, ants, and termites, etc. Finally there are the biocoenoses, or associations of plants and animals that live in particular edaphic situations, such as swamps, deserts, rain-forests, etc. — veritable welters of organisms of many species, all interacting with one another in complex predatory, parasitic, and symbiotic relationships, but forming wholes in which the experienced field-naturalist can readily distinguish general adaptive patterns, though their adequate description is impossible. In the tropics a single species of tree may harbor and nourish more than a hundred species of insects peculiar to itself and these may, in turn, be the prey of many predatory insects, reptiles, birds, and mammals and the hosts of innumerable fungus, protozoan, vermian, and insect parasites. We may truthfully say that there is not on the planet a single animal or plant that does not live as a member of some biocoenose.

True societies are possible only when the components belong to the same species, but the motives of their association may be very diverse. They may be said to belong to three main types according as nutritional, reproductive, or defensive functions predominate in the emergent social behavior. Examples of the nutritional type are certain Coelenterates, like the Siphonophores, corals, etc., the tunicates, tapeworms, and the higher vascular plants. In all these cases the society, or colony, is formed asexually by repeated budding from a single individual and sexual reproduction is restricted to the dissemination of the species and the formation of the initial individual of the colony. Certain members of the colony may be specialized for the purpose of securing food, but this is shared by all the vitally interconnected individuals.

The sexual, or reproductive, type of society is more interesting. It starts with a peculiar temporary coöperation, or mating of only two individuals, the male and the female, and emerges with the growing up of the offspring in coöperative affiliation with the mother or with both parents. A more or less permanent family is thus formed, which may become very numerous either through the production of successive generations of offspring by the same mother or through the consociation of a number of genetically related mothers and their offspring. This is the type of society which we find among the insects, and I have been able to show that it has emerged at thirty independent points at least during the phylogeny of the class. Some of these colonies are very small and evanescent, or feebly integrated but others are very stable, comprise many thousands of individuals (ants, honeybees, social wasps, and termites) and are very highly integrated, with so pronounced a social division of labor among the individuals that definite castes are produced (workers, soldiers, etc.) which are not only functionally, but may even be morphologically differentiated at an early stage of their post-embryonic development. Although the formation of the various castes is primarily connected with the functions of nutrition and defense, the main activities of the colony center in reproduction, i.e., in producing and rearing as many young as possible. That the social activities may present a very definite emergent pattern is most clearly seen in the nests of bees, wasps, ants, and termites. These structures, though the result of the coöperative labor of most of the personnel of the colony, are nevertheless true *Gestalten*, being no more mere sums of the individual activities than is the diverse architecture of cities built by human hands. Not only does each species have its peculiar type of nest, but the nest of every colony of a species exhibits its own emergent idiosyncracies.

The situation among the social insects may be complicated in a very interesting manner by the tendency of their colonies to adopt alien insects as guests, or nest-mates. This is especially true of the ants and termites. These guests are really social parasites and are to be regarded as component members of the colonies in the same sense as dogs have for ages been effective members of human societies. But in the case of the social insects the behavior of the guests may produce veritable social diseases in the colonies that harbor them. As a result of their adoption even the structure and numerical proportions of the castes may be modified, although there is a demonstrable effort at social regulation on the part of the host, just as there is in the single organism whose tissues have been invaded by bacteria or other parasites. This tendency to consociation with strange organisms is carried even further in the union of whole colonies of bees, wasps, and ants with colonies of alien species, and in these so-called " mixed colonies " one of the social components assumes a predatory or parasitic rôle, suppressing the fertile queen, or reproductive organ of the host colony, i.e., indulging in what is known as " parasitic castration " among single organisms, and controlling the activities of the whole, so that a new emergent arises — a super-superorganism, or superorganism of the second degree.

The defensive colonies are represented by the schools, flocks, herds, and bands of fishes, birds, and mammals and consist of individuals, sometimes of only one sex or of the young, belonging to different families. While these congregations are usually based on sexual reproduction, their primary social function is nevertheless the protection of the individuals. There is often a vague differentiation of function as in the stationing of sentinels or of more vigorous or more formidable individuals in strategic positions when the herd is feeding or is otherwise exposed to danger. The bands of monkeys, anthropoids, and primitive men constitute loose social aggregates of this pattern. We must, I believe, regard human societies above the level of the primitive savage horde as still higher emergents, i.e., as super-superorganisms which not only have their reproductive bases in the consociation of numerous families, but have developed innumerable groups, or associations, all so inextricably interrelated that a single individual not only has multitudinous relations with the members of his own and other families, but may belong simultaneously to a number of different associations. The total emergent functional pattern is here so amazingly complicated that it altogether defies observation as a whole.[3]

Whereas nearly all insect societies possess an ontogeny, since they have their inception in a single fertilized mother queen and exhibit a gradual growth, integration, and differentiation as new individuals are successively added from the eggs of the queen till the colony attains a definite adult stature in a manner analogous to that of the ontogeny of the single organism by division and differentiation of its component cells, human society no longer possesses an ontogenetic stage but grows indefinitely by a kind of interstitial swarming, which resembles that of the honeybee only when contingents of individuals are periodically sent out as colonies, as occurred in ancient times among the Greeks and Romans and has been the practice of other European nations during more recent centuries.

Now the various emergents which I have hastily discussed indicate that there is something fundamentally social in living things, and closer scrutiny shows that this must be a characteristic of all life, since every organism is, at least temporarily, associated with other organisms, even if only with members of the opposite sex and with its parents, and every organism is at least implicated in some biocœnose. This statement holds good even of such supposedly un-social creatures as lions, eagles, sharks, tiger-beetles, and spiders. There are, in fact, no truly solitary organisms. We may say, therefore, that the social is a correlate as well as an emergent of all life in the sense in which Morgan speaks of the mind as being both a correlate and an emergent of life. And like the more complicated mental emergents, such as the instincts and conscious activities, striking social emergents make their appearance sporadically and often in unrelated groups of species, as I have shown among the insects.[4]

Indeed, the correlations of the social — using the term in its most general sense — even extend down through the non-living to the very atom with its organization of component electrons. And since reality is given as classes of elements, each represented by innumerable similar, active entities, endowed with an irresistible tendency to cohere and organize themselves into more and more complex emergent wholes, association may be regarded as the fundamental condition of emergence. We are, I believe, bound to assume that the organization is entirely the work of the components themselves and that it is not initiated and directed by extraspatial and extratemporal " entelechies " (Driesch), " organizatory factors " (Eldridge), " deity " (Alexander), or *" élan vital "* (Bergson). Such agencies are conceived as possessing remarkable foresight although the whole multimillenial course of evolution with its innumerable *impasses* and *culs-de-sac*, its abject and tragic failures, would seem rather to be one vast monument to their colossal and hesitating inadequacy, blindness, and stupidity. The resort to such metaphysical agencies has been shown to be worse than useless in our dealings with the " inorganic " world and it is difficult to see how they can be of any greater service in understanding the organic. The tender-minded may still delight in assuming their intervention in the development and maintenance of unicellular and multicellular organisms, whose integration is so exceedingly complicated and opaque that we are probably still centuries removed from any adequate understanding of their functional composition, but on the next level, that of the very loosely organized social, or superorganisms, in which the actual play of the components is open to inspection, it is not so easy to tolerate these ghostly presences.

I fail to understand why Alexander and Morgan select deity as the supervenient level next to mind, since their general scheme of emergent evolution most naturally demands the social as the next level in ascending order. Were prophecy in order we might ask what level may be expected to emerge beyond the social. Perhaps this may be the end of the series, with supervenient extinction, also to be accepted by the race with good cosmic manners if not with Morgan's "natural piety." It would seem, however, that the present very imperfect state of our society may allow for not a few successive emergents in the form of greater solidarity and higher ethics. But here we touch on a consideration which even Herbert Spencer felt to be ominous. Will this prospective, more intensive socialization be analogous to that of the highest social insects, a condition in which specialization and constraint of the single organism are so extreme that its independent viability is sacrificed to a system of communal bonds, just as happens with the individual cell in the whole organism? Within the groups of social insects, as we pass from the socially primitive to the more specialized, or in the ontogeny of the single colony as we pass from its earlier to its later stages, we actually witness a notable and increasing degeneration of the individual. Holmgren has shown that the supraoesophageal ganglion, or brain in mature kings and queens of termites shrinks to one-third, while the sympathetic ganglia increase to three times their original volume. And von Rosen finds that the eyes and optic ganglia of aged royalty among termites also undergo marked degeneration. Furthermore, the eyes, brain, thoracic structure, and often also the pigmentation of the workers in the most highly socialized ants are less developed than they are in the workers of small primitive societies, which are more like the original solitary Vespoid ancestors. There may even be a complete suppression of the worker caste and a return, or dedifferentiation to what is, to all intents and purposes, a nonsocial life in certain ants, bees, and wasps (*Anergates, Psithyrus, Vespa austriaca,* etc.) which behave as parasites in the colonies of other ants, bees, or wasps. We also notice a concomitant degeneration in pigmentation and other structures as we pass from primitive forms like *Mastotermes, Archotermopsis,* and *Hodotermes,* with their small colonies, to *Termes* with its huge colonies of highly specialized individuals. Many more examples might be cited but these will suffice to show that evolution by atrophy certainly accompanies an advance in social integration in the insects. Turning to man we notice a similar regressive development of the individual as civilization proceeds. There is a decline in the sense-organs (witness the number of people with congenital or acquired defects of vision, hearing, and smell), anomalies in the epidermal structures (teeth, hair, and pigmentation), the absence of any demonstrable improvement in the brain cortex and intelligence during historic time (possibly even some deterioration), the greater activity of the visceral nervous system and endocrine glands as shown by the higher emotivity, increasing insanity, criminality, and mob psychology in our larger cities, etc.

Add to all this the atrophy or subatrophy of our organs and tissues brought about by the ever increasing specialization in our activities, and we can hardly fail to suspect that the eventual state of human society may be somewhat like that of the social insects — a society of low intelligence of the individuals combined with an intense and pugnacious solidarity of the whole. Even the intensification of nationality witnessed in existing human society has its counterpart in the hostility of every colony of social insects towards every other colony, even of the same species. A society of the type towards which we may be drifting might be quite as viable and quite as stable through long periods of time as the societies of ants and termites, provided it maintained a sufficient control of the food supply. Intersocietal hostility undoubtedly has its origin in the mutual hostility of the individuals, both of the cells or tissues of single organisms and of the individual organisms composing superorganisms, and this " hostile symbiosis " is the foundation on which Morley Roberts has recently erected a very interesting theory of evolution. The primitive predatism and parasitism from which symbiosis has emerged is not lost by the individuals composing organisms or societies but merely abides in latency, as the most casual observation of our species demonstrates, ready to flare up under certain conditions with the most disastrous results, such as the death of the individual (cancer and other malignant growths and variations), or the dissolution of society (revolution). It follows from such considerations that the optimistic conception of progress as an unceasing process in the human race may be illusory. Roberts suggests that our enlarged fore-brain, the " specific organ of civilization " (C. J. Herrick), with its ninety-two hundred million neurons, of which we are so proud, may really have originated as a malignant overgrowth (tumor), like a cauliflower, and he remarks that " in discussing the factors of evolution objections to our regarding the encroachments of the fore-brain upon the animal function of the human body as perpetual approximations to and recessions from a state of morbid over-growth, on the ground that to this we owe human progress, are wholly irrevelant. Progress, whatever it may be, is obviously relative and a healthy Neanderthal or Cromagnon man, who might as easily dispose of a modern athlete as any gorilla, could be held excused if he thought his bald and almost jawless successor to be in the highest degree degenerate. There can be no doubt that what we, perhaps in our blindness, call the upward progression of the human race, has always been accompanied, especially when advance seemed most rapid, by an increase in disease, and it would in no way be surprising if we learnt at last that the remarkable increase in the fore-brain was not only one of the causes of malignancy but was to be in the end one great cause of the extinction of man. If that proved to be a fact, such a result would but class man as one of the many races of animals which perished of special over-growths and a possible lack of fertility." [5]

The prospect is by no means pleasant. You will be delighted, I am sure, that I refrain from further comment.

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[1] This matter has been more fully considered by Broad (p. 77):

"On the emergent theory we have to reconcile ourselves to much less unity in the external world and a much less intimate connection between the various sciences. At best the external world and the various sciences that deal with it will form a kind of hierarchy. We might, if we liked, keep the view that there is only one fundamental kind of stuff. But we should have to recognize aggregates of various orders. And there would be two fundamentally different types of law, which might be called 'intra-ordinal' and 'trans-ordinal' respectively. A trans-ordinal law would be one which connects the properties of aggregates of adjacent orders. A and B would be adjacent, and in ascending order, if every aggregate of order B is composed of aggregates of order A, and if it has certain properties which no aggregate of order A possesses and which cannot be deduced from the A properties and the structure of the B-complex by any law of composition which has manifested itself at lower levels. An intra-ordinal law would be one which connects the properties of aggregates of the same order. A trans-ordinal law would be a statement of the irreducible fact that an aggregate composed of aggregates of the next lower order in such and such proportions and arrangements has such and such characteristic and non-deducible properties. If we consider the properties of a given aggregate of high order we could then divide them into three classes. (i) Those which are characteristic of this order, in the sense that all aggregates of the order possess them, that no aggregate of lower order does so, and that they cannot be deduced from the structure of the aggregate and the properties of its constituents by any law of composition which has manifested itself in lower orders. These might be called the 'ultimate characteristics' of the order. (ii) Those which are characteristic of this order; but which could in theory be deduced from the structure of the aggregate, the properties of its constituents, and certain laws of composition which have manifested themselves in lower orders. These might be called 'reducible characteristics' of the order. (iii) Properties which aggregates of this order share with those of lower orders. These might be called 'ordinally neutral properties.'"

[2] I have used the word "viable" intentionally because monsters and other extreme unadapted mutations are also emergents.

[3] Only in certain cases, such as ceremonials and rituals, is it possible to observe emergent social patterns as wholes, or *Gestalten*. A fine example of such a pattern, covering a wide area and many activities and carried out by many individuals, though unperceived by the latter, is the *kula* among the natives in the archipelagoes

of Melanesian New Guinea as described by Malinowski in his *Argonauts of the Western Pacific.*

[4] This matter is fully discussed in my *Social Life Among the Insects*, 1923, and *Les Sociétés d'Insectes. Leur Origine. Leur Evolution*, 1926.

[5] The degenerate or pathological character of civilization has been emphasized by many authors, including Ruskin and Carpenter. The following is from Schiller (*Ueber die aesthetische Erziehung des Menschen*, 1795) and is quoted by Jung in his *Psychological Types*, p. 91: "I do not ignore the advantages which the present generation, regarded as a whole and measured by reason, may boast over what was best in the bygone world; but it must enter the contest as a compact phalanx and measure itself as whole against whole. What individual modern could enter the lists, man against man, and contest the prize of manhood with an individual Athenian? Whence then arises this unfavorable individual comparison in the face of every advantage from the standpoint of the race?" In the writings of Stärcke ("Psychoanalysis and Psychiatry," *Internat. Journ. Psycho-Anal.*, 2 (1921), pp. 361–415), who actually dubs the disease of civilization "metaphrenia," I find the following remarks: "Civilization seems then to be a disease which is imposed on a certain portion of society in order to obtain a certain extra gain whereby all profit. . . . Civilization from the individual point of view belongs to neurotic phenomena. . . . We see the civilization of a people or a race built up in cycles according to the mechanisms of the obsessional neurosis, until it becomes no longer bearable; then there comes about a limitation of the useful effect through the return of the repressed material in disguised form, and a breaking through of forbidden things in war and revolution, according to the principles of the manic psychoses, while various 'isms' analogous to the paranoid fields are not lacking. . . . Civilization demands regression," etc.

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Discussion of the papers in the General Session of Division A was led by H. E. PULLING (Wellesley) and J. E. BOODIN (Carleton).

II. SECTIONS OF DIVISION A

SECTION I

Time: Tuesday, September 14, 9.30 A.M.
Place: Gore Hall Dining Room
Subject: Physics and Metaphysics, with Special Reference to the Problem of Time
Chairmen: W. P. MONTAGUE, Columbia
E. G. SPAULDING, Princeton

NEWTONIAN TIME AND EINSTEINIAN TIMES

E. B. McGILVARY
(*Wisconsin*)

NEWTONIAN time as used in this paper is not Newton's Absolute Time which flows uniformly without regard to physical changes. It has, however, the character of singleness in common with Newton's Time, so that relatively moving systems share the same simultaneity. It differs from Newton's Time in that this simultaneity is defined in terms of observable physical events.

Definition 1. The uniform translational velocity of any system K' relative to some other system K is "homogeneous" if all the measurements of this velocity are made in K, the time measurements being made by use of a number of previously synchronized clocks placed at different points in K in the line of motion. It is "heterogeneous" if the space measurements are made in K, and the time measurements are made in K' by the use of a single clock.

Definition 2. Any two clocks in the two systems "run at the same rate" or are "concurrent" if the heterogeneous relative velocity of the two systems is the same numerical constant by both clocks.

Definition 3. All planes in either system, that are perpendicular to the relative motion of the systems, are "normal planes."

Definition 4. All concurrent clocks in any normal plane of K, together with those in any normal plane of K', have "Newtonian synchronism" or are "N-synchronous" if on the coincidence of these planes these clocks have equal readings.

Definition 5. N-synchronous clocks in either system are "standard clocks" if used for synchronizing clocks in the other system. This synchronization consists in giving readings to the latter clocks equal to those of the former when the normal planes in which they respectively lie are coincident. Clocks thus synchronized are "standardized clocks."

Definition 6. Time is "Newtonian" if standardized clocks in K and K' have equal readings on the coincidence of the respective normal planes in which they lie. Standard and standardized clocks with Newtonian time are "Newtonian clocks."

Definition 7. Events are simultaneous in both systems if Newtonian clocks at the places of these events have equal readings at the time of the events.

It is to be remarked that possible changes in rate of change of clock-readings during acceleration have no bearing on Newtonian time as defined; also that in Newtonian time the homogeneous velocity of K' relative to K is equal to its heterogeneous velocity.

By Einsteinian times are meant the times shown by clocks according to the special theory of relativity. Let S and S' be two systems of rectangular coördinates, whose X axes and XY planes are respectively coincident, S' having the uniform homogeneous velocity v relative to S in the positive X direction. Let the respective origins, O and O', coincide at time $t = t' = 0$. The Einsteinian times t and t' are interrelated according to the following transformations:

$$x' = \beta(x - vt), \tag{1}$$
$$y' = y, \tag{2}$$
$$z' = z, \tag{3}$$
$$t' = \beta\left(t - \frac{vx}{c^2}\right), \tag{4}$$
$$x = \beta(x' + vt'), \tag{5}$$
$$t = \beta\left(t' + \frac{vx'}{c^2}\right), \tag{6}$$
$$\beta = \frac{1}{\sqrt{1 - \frac{v^2}{c^2}}}, \tag{7}$$

c = the velocity of light, a constant.

On examining the Einsteinian times we discover that Einsteinian clocks run at the same rate by Definition 2. For instance, O' covers the distance m from O measured in S by time $t' = \frac{m}{\beta v}$, and O covers distance n from O' by time $t = \frac{n}{\beta v}$. Thus the relative heterogeneous velocity w of the two systems is

$$w = \beta v. \tag{8}$$

The Einsteinian clocks in the YZ planes of S and S' are N-synchronous by Definition 4, all of them having zero readings on the coincidence of these planes. Using these clocks for synchronizing other clocks in S' and S by the method described in Definition 5, and designating the resultant readings of the standardized clocks by $\bar{t}$ and $\bar{t}'$ respectively, we get the following transformations:

$$\bar{t} = t - x\left(\frac{\beta - 1}{\beta v}\right), \tag{9}$$

$$\bar{t}' = t' + x'\left(\frac{\beta - 1}{\beta v}\right). \tag{10}$$

By equations (1) and (5), the normal planes $x = m$ and $x' = -n$ come into coincidence at times $t = \dfrac{\beta m + n}{\beta v}$, $t' = \dfrac{\beta n + m}{\beta v}$. Substituting from these equations into (9) and (10) respectively we get

$$\bar{t} = \bar{t}' = \frac{m + n}{\beta v}. \tag{11}$$

Thus by resetting Einstein's clocks by method described in Definition 5, we get Newtonian time as defined in Definition 6. The Newtonian (homogeneous and heterogeneous) velocity $\bar{v}$ of S' in S is

$$\bar{v} = w = \beta v. \tag{12}$$

According to the Einsteinian readings of the clocks in S and S' there is the Fitzgerald contraction of lengths in the X direction in either system as viewed in the other. According to their Newtonian readings, this contraction does not occur, as is proved by substituting from (9) and (12) into (1), and from (10) and (12) into (5), whereby we get the classical transformation

$$x' = x - \bar{v}\bar{t}. \tag{13}$$

According to Einstein no physical velocity can exceed c. He gets this result by using homogeneous velocity as reckoned by his clock-readings. But when we take the heterogeneous velocity of S and S' as reckoned by his clocks, we find that if $v = \dfrac{c}{\sqrt{2}}$, $\beta = \sqrt{2}$; and from (8) and (12) we get

$$w = c = \bar{v}. \tag{14}$$

Therefore the Newtonian regards Einstein's result as due to the fact that Einstein has set his clocks out of synchronism. It is easy to set concurrent clocks at any points A and B, where $AB = 1$ kilometer, so that no physical velocity from A to B, reckoned homogeneously by these clocks, can exceed a kilometer an hour. All that is necessary is to make the difference in the readings of the clocks a suitably selected function of the heterogeneous velocity w. Thus if the clock at B is set faster than that at A by $1 - \frac{1}{w}$ hour, a motor car, whatever be its heterogeneous velocity w, cannot exceed the homogeneous velocity of one kilometer per hour, reckoned by clocks so set. Judged by Newtonian time, Einstein has set his clocks so that every clock in S is faster than any other clock in S lying in the negative X direction from it, and every clock in S' is faster than any other clock in S' lying in the positive X direction from it; and according to equations (9) and (10) the difference in setting is a function of $\beta v = w$. The direction in either system of the faster clock from the slower clock is thus the direction in which the other system is moving. Any point in either system is thus moving from slower to faster clocks in the other system; and the time unit in the latter system reckoned by different successive clocks along the line of relative motion is thus greater than the time unit of any single clock.

The Einsteinian formulas for the addition of velocities can easily be derived from equations (9) and (10) and from the classical formulas for such addition.

Let us now examine from the point of view of Newtonian time the reasoning by which Einstein derived his transformation equations. His problem was to take clocks exactly alike in two systems relatively moving with uniform velocity, and set them in such a way that the homogeneous velocity of the systems should be v, and a homogeneous velocity c in any direction in either system should also be homogeneous velocity c in the other system, all the velocities being reckoned by the clocks so set. Because light has been discovered by experiment to have velocity c during a round trip, this velocity being measured by a *single* clock, Einstein tacitly assumed that it would have the homogeneous velocity c in either direction as measured by *any two* clocks at different places in either system *after* he has set these clocks according to transformations derived in the solution of his problem. This assumption we shall examine later. Until we have examined it, we shall speak, not of light, but of signals transmitted with velocity c.

Now that Einstein has given us the solution of his problem, we can arrive at it by a much shorter route than he took. A signal is sent from O and O' when these points are coincident at time $t = t' = o$. On the arrival of this signal at any point in either system the clock at that point is to be so set that this signal shall have had the homogeneous velocity c and that the two systems shall have had the homogeneous velocity v. It is tacitly postulated that $y' = y$, and $z' = z$. Let P', $(y' = n)$, be any point on the Y axis of S', and let P be the point in S coincident with P' on the arrival of the signal at P'. By tacit postulate, which we shall examine later, the signal in arriving at P' arrives simultaneously at P. Let $OP = m$. On the arrival of the signal at P and P', the clock readings at these respective points are $t = \frac{m}{c}$, $t' = \frac{n}{c}$. But $n = \frac{m\sqrt{c^2 - v^2}}{c} = \frac{m}{\beta}$. Therefore

$$t' = \frac{t}{\beta} = \frac{t}{\beta} - \beta t + \beta t = \beta t - \frac{t(\beta^2 - 1)}{\beta} = \beta t - \frac{v^2 t}{\beta(c^2 - v^2)} = \beta t - \frac{\beta v^2 t}{c^2}. \quad (15)$$

But S' is to have homogeneous velocity v by the S clock at P taken with the S clock on the Y axis at $y = n$. Hence, for P, $x = vt$. Substituting this value in (15) we get

$$t' = \beta\left(t - \frac{vx}{c^2}\right). \quad (4)$$

By similar reasoning we get for point Q, $(y = n)$, on the Y axis of S and for point Q' coincident therewith on the arrival of the signal at Q, the transformation

$$t = \beta\left(t' + \frac{vx'}{c^2}\right). \quad (6)$$

Solving for x and x' from (4) and (6) we get (1) and (5).

Transformations (1) to (7) inclusive thus secure the value c in either system for a homogeneous velocity c along the Y axis of the other system, and, by similar reasoning, for a homogeneous velocity c along the Z axis of the other system.

Dividing (1) by (4) and equating the result with c and solving for c we get $\frac{x'}{t'} = c = \frac{x}{t}$, which shows that the transformations obtained secure the homogeneous velocity c in either system for the homogeneous velocity c in the other system in the X direction.

But this result does not prove that *light* has the constant homogeneous velocity c in both systems, when time is measured by Einsteinian clock-readings thus obtained. Let me illustrate what I mean by a somewhat analogous case. Let four clocks exactly alike be placed, two of them, viz., A' and A'' at point A, and the other two, B' and B'', at point B. Let a horse and a motor car be sent simultaneously from A when clock A' is set at zero. When the horse arrives at B let the clock B' be set so that the speed of the horse from A to B shall be q, and when the car arrives at B let the clock B'' be set so that the speed of the car from A to B shall also be q. This equality of their speeds reckoned by clocks set so as to make these speeds equal does not prove that they were running, neck and radiator, all the way, neither does it guarantee that on the return trip their speeds will be equal when the speed of the horse is reckoned by the clocks B' and A', and the speed of the car is reckoned by clocks B'' and A'', *after* A'' has been set, on the arrival of the car at A, so that the return journey of the car shall have had the speed q. Is there any way of telling that the relativist has not committed a fallacy similar to that suggested as possible in connection with horse and car? It is only by actual experiment with *light* and *clocks set by light* that the question can be answered. And this experiment has never been made; possibly it may never be made. Meantime the Newtonian looks askance at the relativistic assumption that light has the constant velocity c by Einsteinian clocks.

But what of the Michelson-Morley experiment and other similar experiments? Let us for the present assume that these experiments are definitive. What do they prove? The Newtonian may be willing to say that they prove that there is no material ether, and also that every system S of objects, correlatively at rest, has its own space as distinct from the space of some other system S' moving relatively to S. Why may not the spaces of the two systems be metrically isotropic and physically interrelated in the following manner? An electro-magnetic disturbance originating at any point E in S occurs at point E' in S', E and E' being coincident on the occurrence of the disturbance. Let us call E and E' the respective sources of the disturbance, and let the time used be Newtonian. The homogeneous velocity of the transmission of the disturbance is c in each system, the space measurement for this velocity being made from the source in that system. Thus at F, $(EF = d)$, there is a response to the disturbance at E after time interval $\frac{d}{c}$; and at F', $(E'F' = d)$, there is a response to the disturbance at E' after interval $\frac{d}{c}$. Let the lines

EF and $E'F'$ coincide and be parallel to the relative motion of the two systems. The two responses at F and F' are simultaneous, although F and F' are not coincident at the time of the responses; they were coincident at the time of the *disturbance* to which responses are made. In other words, the transmission to any point of an electro-magnetic disturbance at any other point takes place only in the space of the former point, and its transmission in any other space does not concern the former point. Interferences between transmissions from any disturbance occur only when the interfering transmissions are in the same space; i.e., transmissions in different spaces do not interfere. Hence Michelson's interferometer showed no shift in interference fringes, since it was fixed relatively to the earth and was indifferent to transmissions in the space of the earth's orbit. This hypothesis, very briefly sketched, accords with the phenomena of astronomical aberration and with the shift of spectral lines known as the Doppler effect. Whether it accords with all other known facts of electro-magnetic propagation remains to be ascertained. The purpose of this paper is merely to throw out a suggestion of a Space-Time in which the time is single and Newtonian, and the space is multiple and metrically isotropic, and in which all the definitions are couched in observational terms. One more theory at a time when theories abound can do no harm.

ZEITVERHAELTNISSE IM KOSMOS, EIGENZEIT, GELEBTE ZEIT UND METAPHYSISCHE ZEIT

Hermann Weyl
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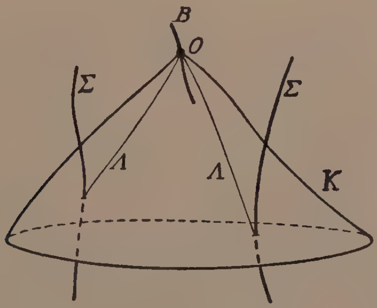
1. Die möglichen Raumzeitstellen oder Weltpunkte bilden ein vierdimensionales Kontinuum im mathematischen Sinne. Es heisst bereits, diesem Medium der Aussenwelt eine bestimmte Struktur zuschreiben, wenn man an eine Zerspaltung der Welt in einen absoluten Raum und eine absolute Zeit in dem Sinne glaubt, dass es eine objektive Bedeutung habe, von zwei getrennten, raumzeitlich eng begrenzten Ereignissen zu sagen, sie geschähen am gleichen Ort (zu verschiedenen Zeiten) oder zur gleichen Zeit (an verschiedenen Orten). Alle gleichzeitigen Weltpunkte bilden eine dreidimensionale Schicht, alle gleichortigen Weltpunkte eine eindimensionale Faser. Die Struktur der Welt gemäss dieser Ansicht lässt sich also dahin beschreiben, dass die Welt eine Faserung und eine quer zu den Fasern verlaufende Schichtung besitzt.

Wird ein vierdimensionales Kontinuum auf Koordinaten bezogen, so ist es dadurch abgebildet auf den vierdimensionalen Zahlenraum, das Kontinuum aller Zahlenquadrupel. Nur um eine vertrautere Ausdrucksweise zu ermöglichen, werde der Zahlenraum unter Streichung einer Dimension ersetzt durch den mit einem Cartesischen Koordinatensystem ausgestatteten Anschauungsraum. Man bedarf einer solchen willkürlich angenommenen Abbildung, um sich der gewöhnlichen geometrisch-kinematischen Termini bedienen zu können. Ein zweidimensionales Analogon sind die geographischen Karten. Im Hinblick auf eine bestimmte Karte kann man konstatieren, dass drei Orte auf der Erde in gerader Linie liegen, wird sich dann aber keineswegs wundern, wenn sie auf einer andern Karte dies nicht tun. Objektive Bedeutung haben nur solche Beziehungen, welche unabhängig von der gewählten Abbildung bei beliebiger Deformation des Bildes bestehen bleiben. — Die weltgeometrische Beschreibung ist keine bildhafte, sondern eine getreue Wiedergabe des Sachverhalts selbst, solange der Begriff des Kontinuums im abstrakt mathematischen Sinne verstanden wird; bildhaft wird die Schilderung erst dann, wenn man den Zahlenraum durch den Anschauungsraum ersetzt.

Die durch einen Weltpunkt O laufende Schicht, die Gegenwart für O, scheidet von einander die Vergangenheit und die Zukunft.

Die reale Bedeutung dieser Scheidung ist, wie schon Leibniz erkannte, eine kausale: die abstrakten Zeitverhältnisse im Kosmos sollen den Wirkungszusammenhang, die Kausalstruktur der Welt ausdrücken. Hinsichtlich ihrer hat aber die moderne Entwicklung aus zwingenden Gründen zu einer wesentlichen Korrektur geführt. Die Scheidung in Vergangenheit und Zukunft, in denjenigen Weltteil, in welchen Wirkungen von O aus gelangen können, und denjenigen, von dem aus Wirkungen nach O gelangen können, wird nicht bewirkt durch eine „Schicht,“ sondern durch ein kegelförmiges Gebilde mit Spitze in O, den „Lichtkegel.“ Die anschauliche Auffassung dieser Verhältnisse bereitet nicht die geringsten Schwierigkeiten, wenn man immer, statt nach dem Zeitverhältnis zweier Ereignisse, nach ihrem möglichen Wirkungszusammenhang fragt. Der eigentlich sachlich wichtige Unterschied der Lichtkegel von den Schichten liegt in Folgendem: Befindet sich der Weltpunkt O' auf der durch O laufenden Schicht, so fällt die Schicht durch O' mit der Schicht durch O zusammen; liegt hingegen O' auf dem von der Spitze O ausgehenden Lichtkegel, so fällt der von O' ausgehende Lichtkegel keineswegs mit diesem Lichtkegel von O aus zusammen.



2. Um das Verhältnis von Aussenwelt und wahrnehmendem Bewusstsein in seinen prinzipiellen Zügen zu verstehen, vereinfache ich meinen Sinnesleib zu einem Punktauge. Das Punktauge beschreibt eine Weltlinie. Die Anordnung und Reihenfolge der Punkte dieser Weltlinie entspricht dem gelebten Früher und Später der immanenten Zeit. Ein typischer Fall, an welchem sich alles Wesentliche übersehen lässt, ist die Beobachtung zweier oder mehrerer Sterne. In der Figur sind die Elemente gezeichnet, von denen der Winkelabstand θ zweier Sterne abhängt: die Weltlinie B des Beobachters, auf ihr der Weltpunkt O, in welchem die Beobachtung stattfindet, von O ausgehend der rückwärtige Lichtkegel K; ferner

die beiden Weltlinien der Sterne Σ, die von dem Kegel K in je einem Punkte getroffen werden, und die Weltlinien Λ der beiden von den Sternen her in O eintreffenden Lichtsignale. Die Masszahl θ wird daraus ermittelt durch eine rein arithmetisch beschreibbare Konstruktion. Sie ist invariant, d.h. von solcher Art, dass sie zu der gleichen Masszahl θ führt, wenn sie, nach einer beliebigen Deformation des Bildes, von neuem gemäss der gleichen Vorschrift an dem verzerrten Bilde vorgenommen wird. Jene Winkel θ zwischen je zwei Sternen eines Sternbildes sind massgebend für die objektiv nicht zu beschreibende, sondern nur in der Anschauung zu erlebende visuelle Gestalt des Sternbildes, die erscheint unter der gleichfalls nicht objektiv zu fassenden Voraussetzung, dass Ich jenes Punktauge bin. Stimmen sie überein mit denen eines zweiten Sternbildes, so erscheinen beide Sternbilder in der gleichen, sonst in verschiedener Gestalt.

Das unmittelbar Erlebte ist subjektiv und absolut. Die objektive Welt ist hingegen notwendig relativ, durch ein Bestimmtes, Zahlen oder andere Symbole nur zu repräsentieren, nachdem in die Welt willkürlich ein Koordinatensystem hineingetragen ist. Diese Gegensatzpaar: subjektiv-absolut und objektiv-relativ scheint mir eine der fundamentalsten erkenntnistheoretischen Einsichten zu enthalten, die man aus der Naturforschung ablesen kann. Die Notwendigkeit des Koordinatensystems geht zurück auf die letzte erkenntnistheoretische Tatsache, die Durchdringung des Dies (hier-jetzt) und des So, welche die allgemeine Form des Bewusstseins ist: nur indem kontinuierliche Ausdehnung und kontinuierliche Qualität sich überdecken, ist etwas. Diese Doppelnatur des Wirklichen hat zur Folge, dass wir ein theoretisches Bild des Seienden nur entwerfen können auf dem Hintergrund des Möglichen. So ist insbesondere das vierdimensionale extensive Medium der Welt das Feld der möglichen Koinzidenzen. Das Koordinatensystem wird dadurch unvermeidlich, dass wir die Struktur der Welt erfassen müssen, die nicht aus den wirklichen Geschehnissen, sondern nur aus der Fülle aller gesetzmässig möglichen abzulesen ist.

Nach Einstein trägt die Welt eine objektive Massbestimmung, gemäss welcher die Stücke der Weltlinie eines Körpers sich zahlenmässig aneinander messen lassen (Eigenzeit). Zum Zwecke einer vorläufigen Anknüpfung an die Erfahrung definiert Einstein die Eigenzeit durch die Angaben einer vom Körper bei seiner Bewegung mitgeführten Uhr. In Wahrheit aber ist das Verhalten der Uhr unter dem Einfluss des metrischen Feldes aus ihrer eigenen materiellen Konstitution und den Wirkungsgesetzen herzuleiten und kann nicht durch eine Definition präjudiziert werden. — Auch die gelebte Zeit des Bewusstseins trägt ausser der Ordnung des Früher und Später ein vages Mass in sich; es gibt eine unmittelbare Schätzung der gelebten Zeit. Dafür ist sicherlich gleichfalls die Eigenzeit die physische Grundlage, doch hängt sie, nicht anders wie die Zeitangaben einer Uhr, noch von mancherlei Nebenumständen ab, die der Psychologe genauer zu untersuchen hat.

3. Die gelebte Zeit ist ein beständiges, mit wechselndem Gehalt erfülltes Jetzt. Aber jede Momentanphase des Gelebten wandelt sich vom Modus des Jetzt-seienden in den Modus des Soebengewesenen; dieses Absinken in die Vergangenheit, erfasst in der Retention, ebenso die Protention der sich zur Gegenwart heraufhebenden Zukunft, gehören zum unmittelbaren Zeiterleben dazu. Hingegen Rückerinnerung ist ein Akt der Vergegenwärtigung von Bewusstseinselementen, die als gelebte verschwunden sind; hier konstituieren sich bereits objektive Gebilde, deren Sinnesgehalt unabhängig vom Gelebt-werden als identischer festgehalten wird. Die Zeit wird dadurch zu einem durch die Beziehungen des Früher und Später geordneten eindimensionalen Kontinuum von Zeitstellen, an welche die erlebten Inhalte gebunden sind; das Bewusstsein gleitet auf dieser Zeitlinie entlang und erweckt einen Punkt nach dem andern zum Leben des Jetzt, der unmittelbaren Gegenwart. Die in einem vierdimensionalen Medium ausgebreitete Welt ist schlechthin, sie geschieht nicht; nur vor dem Blick des in der Weltlinie seines Leibes emporkriechenden Bewusstseins lebt ein Ausschnitt dieser Welt auf und zieht an ihm vorüber als räumliches, in zeitlicher Wandlung begriffenes Bild.

In dieser Schilderung tritt die metaphysische Zeit auf als Bindeglied zwischen der objektiven Zeit, dem mathematischen Ordnungsschema der Punkte auf der Weltlinie des Ichleibs, und der von mir gelebten Zeit. Gewiss wird die nur in mathematischen Symbolen ausdrückbare objektive Welt gewonnen aus dem in der Erfahrung Gegebenen — durch Abstraktion, Objektivation, Totalisierung, Projektion auf den Horizont des Möglichen; zerschneidet man diese Verbindung, so bleibt ein blosses Zeichenspiel ohne „Bedeutung" zurück. Aber wenn auch so das Bewusstseinsgegebene erkenntnistheoretisch das Erste ist, so kann die Vernunft doch nicht umhin, den Seinsgründen nach die objektive Welt als das Primäre anzusetzen. Metaphysik ist der Versuch, diese Umkehr durchzuführen. Die Relativitätstheorie hat also insofern eine metaphysische Bedeutung, als sie gelehrt hat oder wenigstens von Seite der Physik bestätigt hat, dass jene tiefgreifende Modifikation des Seins durch die Zeit, welche wir durch das Wort „Jetzt-sein“ ausdrücken, nicht der Welt, sondern den Monaden aufgeprägt wird. Die Frage nach der Möglichkeit der Metaphysik soll hier gar nicht angeschnitten werden; der oben hervorgehobene Gegensatz von subjektiv-absolut und objektiv-relativ enthält in dieser Hinsicht eine deutliche Warnung, sofern das Bestreben der Metaphysik auf ein objektiv-absolutes Sein gerichtet ist.

Eine gewisse Schwierigkeit bereitet bei der Konzeption der metaphysischen Zeit die Punktförmigkeit des Jetzt innerhalb des Zeitkontinuums; denn innerhalb eines Kontinuums ist ein Punkt ohne die Umgebung, durch die er mit dem ganzen Kontinuum verwachsen ist, nicht existenzfähig; der Punkt im Kontinuum ist nicht Element einer Menge, sondern ideale Grenze fortgesetzter Teilungen. Und doch soll hier die Gegenwart streng punktartig ins Bewusstsein treten und im selben Augenblickspunkt wieder erlöschen. Einen Ausweg zeigen hier meiner Meinung nach die Tatsachen der Atomistik. Alle physikalischen Charakteristika der letzten Elementarbestandteile der Materie, insbesondere der Elektronen, sind am umgebenden Felde abzulesen; die Anwendung der geometrischen, mechanischen, physikalischen Begriffe auf das Elektron selbst und seine Ausdehnung scheint ohne Bedeutung zu sein. Danach möchte man das Materieteilchen als etwas Extramundanes, nicht extensiv Ausgedehntes ansetzen. Es ist selber nicht räumlich, sondern steckt nur in einer räumlichen Umgebung drin, von welcher seine Wirkungen ihren Ausgang nehmen. In einer halb bildlichen Wendung könnte man sagen, dass das Weltkontinuum entsteht aus einem rein fiktiven saumlosen Kontinuum durch Herausschneiden einzelner Weltröhren, welche anstelle der Weltlinien der verschiedenen Materieteilchen in unserer bisherigen Auffassung treten; aber das Innere der Röhren incl. der begrenzenden Hülle gehört nicht mehr zur Welt, sondern ist ein vom Felde aus unerreichbarer Saum wie das Unendlichferne. Dann gibt es kein punktförmiges Jetzt und auch kein exaktes Früher und Später. Die Dinge verhalten sich dann, roh gesprochen, so, als ob der an den Leib gebundene Lebenspunkt, der die objektive Welt zum Dasein für das Bewusstsein weckt, nicht nur eine diffuse räumliche, sondern auch eine diffuse zeitliche Ausdehnung besitzt. Die unmittelbare Gegenwart ist nicht gänzlich abrupt, sondern immer steht ein schmaler, nach der Vergangenheit und nach der Zukunft rasch abklingender Hof zugleich mit in dem sich selbst leuchtenden Lichte der Unmittelbarkeit.

TIME

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Sections: I, *Supersession:* II, *Prehension:* III, *Incompleteness:* IV, *Objective Immortality:* V, *Simultaneity:* VI, *Time as Epochal*

I. *Supersession.* In his book, *Space, Time, and Deity*, Alexander enforces the precept that we should take time seriously. No philosopher takes time seriously who *either* conceives of a complete totality of all existence, *or* conceives of a multiplicity of actual entities such that each of them is a complete fact, "requiring nothing but itself in order to exist, God only excepted." If time be taken seriously, no concrete entity can change. It can only be superseded. Also it must be superseded because supersession is part of its real essence, in Locke's sense of the term "real essence."

Thus in the place of Descartes's substance with "endurance" as one of its principal attributes, we must put the notion of an "occasion" with "supersession" as part of its real essence. By Locke, the phrase "perpetually perishing" is used in the same sense as "supersession" here.

Also in the place of Descartes's doctrine of the two species of substances, bodies and minds, we must hold that each occasion is dipolar, and that one pole is the physical occasion and the other pole is the mental occasion. The physical occasion, as conceived with the abstraction of the mental occasion, and the mental occasion, as conceived with the abstraction of the physical occasion, are each of them devoid of the full concreteness of the dipolar occasion. In order to avoid misunderstanding, I interject the statement, otherwise irrelevant to this paper, that there is a contrast of importance as between the two poles, and that in this contrast the relative importance of either may be negligible.

Supersession is a three-way process. Each occasion supersedes other occasions, it is superseded by other occasions, and it is internally a process of supersession, in part potential and in part actual. One example of the actual internal supersession in an occasion is that the mental occasion supersedes the physical occasion. Thus the physical pole must be explained before the mental pole, since the mental pole can only be explained as a particular instance of supersession disclosed in the analysis of the fully concrete occasion.

Time is concerned primarily with the physical poles of occasions, and only derivatively with the mental poles. But the linkage between the physical and the mental pole of an occasion illustrates the truth that the category of supersession transcends time; since this linkage is both extra-temporal and yet is an instance of supersession.

II. *Prehension.* The concept of time is complex, and arises from the interplay of three fundamental categories, namely, *Supersession*, *Prehension*, and *Incompleteness.* The category of Prehension expresses how the world is a system of organisms. An occasion is a concretion — that is, a growing together — of diverse elements; that is why each occasion is an organism. The elements thus organized fall into two classes; (i) the other occasions: and (ii) the universals, — or, as I prefer to call them, the eternal objects; these eternal objects are the *media* of actuality, whereby the *how* of each actual occasion is determinate. Because the other occasions are each in a definite way required for the organization of any one occasion *A*, the world is called a system. The definite way in which *A* includes other occasions in its concretion is here called "Prehension." By this term, blind physical perceptivity is meant. We recall Kant's doctrine that "Intuitions without concepts are blind." The physical world exhibits itself as a system of organisms arising out of concretions of blind intuitions.

The physical world includes the eternal objects as its defining elements; but not conceptually, only intuitively. The conceptual introduction of eternal objects is effected by the mental occasions which achieve knowledge by their conceptual analysis of their associate physical occasions. But pure perception is the fundamental relationship of physical occasions in the physical world. It has wrongly been assigned to mentality, which is merely analytic; though this analysis, being partial and also having regard to the exclusions as well as the inclusions, can exhibit a contingent originality, in the forms of "attention" and "imagination."

There are comparative depths of actuality, and each occasion only achieves its depth by reason of its limitations, that is, by reason of its exclusions. Occasion *A* does not prehend occasion *B* *simpliciter*, but *B* under a limitation which is its objectification. This objectification is provided by the eternal objects whereby *B* is prehended into *A* as an example of those objects. Thus *B* is objectified for *A*, and the eternal objects are the relational elements which effect the objectification.

The eternal objects are said to have modes of *ingression* into the actual occasions. These modes define the objectivity of the prehended occasions in any one physical occasion, and they define the concepts whereby the associate mental occasion analyzes the physical occasion, thereby effecting a new synthesis which is the unity of consciousness. Thus eternal objects define — both for physical and for mental poles — the functional processes of concretion, and are thus always relational in their operation.

III. *Incompleteness.* Time requires incompleteness. A mere system of mutually prehensive occasions is compatible with the concept of a static timeless world. Each occasion is temporal because it is incomplete. Nor is there any system of occasions which is complete; there is no one well-defined entity which is the actual world. This phrase, "the actual world," means the past, present, and future occasions as defined from the standpoint of some present occasion. It is a demonstrative pronoun, analogous to "he," "she," "it," "tomorrow," and "yesterday." Its meaning is defined by its context.

The incompleteness of an actual occasion A means that A prehends in its concretion objectification of occasions $X, Y, Z, \ldots$ which must supersede A but, as in A, have not the actuality of determinate concretions. Thus the objectification of its own supersession belongs to the real essence of A. A calendar of next year, and a railway time-table, render this truth about our physical occasions intellectually explicit in our mental occasions.

Thus the category of incompleteness means that every occasion holds in itself its own future; so that anticipation is primarily a blind physical fact, and is only a mental fact by reason of the partial analysis effected by conceptual mentality.

Physical anticipation illustrates the truth that the creativity, whereby there is supersession, cannot be disjoined from the creature which is superseded. The character of the creativity is found in the analysis of the creature. The creativity *for* the creature has become the creativity *with* the creature; and the creature is thereby superseded. This doctrine, that the objectified future is prehended in each actual occasion, is only a version of the old doctrine that the process of becoming is a union of being with not-being.

IV. *Objective Immortality.* Physical memory is another exemplification of the category of incompleteness. In occasion B there is a physical memory of each antecedent occasion, such as A. Since A is antecedent, B prehends A into itself as contributing a measure of determinate completion. This prehension of A into B is a relational functioning with an individual character expressible in terms of eternal objects. These eternal objects, thus functioning, determine the objectification of A whereby it becomes a constitutive element in the concrescence of B. This transaction exhibits A as relatively determinate, except for its indetermination arising from the indetermination of *B* in the converse anticipatory objectification of *B* in *A*. Thus the full transaction between *A* and *B*, consisting of the pair of objectifications, constitutes *A* and *B* as poles in a linkage. *A*, in its function of a constituent member of this linkage, *A* and *B*, is more complete than *A* in abstraction from the linkage. For the indetermination of *B* in *A*, which clings to *A* in abstraction, is removed by the actual concretion of *B* in the full linkage. Thus in the community, *A* and *B*, the incompleteness of *A* by reason of *B* is rectified by the completion of *B* so far as its transaction with *A* is concerned: *A* has thereby an added meaning. Hence each occasion *A* is immortal throughout its future. For *B* enshrines the memory of *A* in its own concretion, and its essence has to conform to its memories. Thus physical memory *is* causation, and causation *is* objective immortality. Also conscious memory is that partial analysis of causation which is effected by the associate mental occasion.

Thus Hume, when he asks for direct consciousness of causation should be directed to memory.

The ordinary mechanistic account of memory is obviously inadequate. For a cerebration in the present analogous to a cerebration in the past can, on this theory, only produce an image in the present analogous to the image in the past. But the image in the present is not the *memory* of the image in the past. It is merely an image in the present. This criticism also applies to Locke's doctrine of memory.

According to the doctrine which is now being developed, the image in the present is the outcome of the gathering up of the true memory into the creativity of the present. Hume's "faint copy" is the image in the present, but its equally present character of being a copy arises from its comparison with the objectification of the past which is the true memory.

The irreversibility of time follows from this doctrine of objective immortality. For the later occasion is the completion of the earlier occasion, and therefore different from it.

V. *Simultaneity*. Past and future have thus been explained as referring to causal relationships in which an occasion *A* is involved. But there are occasions which are not prehended in *A* in any causal sense, except as conforming to the general systematic character of the universe. These occasions are the occasions *simultaneous with A*. Thus if there be any contingency in the universe, the contingency inherent in the concretion of *A* is independent of the contingencies inherent in the occasions simultaneous with *A*.

But *A* does prehend these occasions in the mode of *presentational immediacy*. The eternal objects functioning in this prehensive mode are termed the *sense-data*.

This presentational immediacy of the world simultaneous with *A* embodies the originative character of *A*. It is the self-creative self-enjoyment of *A* in its character of a concretion. To explain it, you must analyze *A*, and not the simultaneous world; since it constitutes *A's* peculiar originality. Thus presentational immediacy has the character of physical imagination, in a generalized sense of that word. This physical imagination has normally to conform to the physical memories of the immediate past; it is then called sense-perception, and is non-delusive. It may conform to the physical memories of the more remote past: it is then called the image associated with memory. It may conform to some special intrusive element in the immediate past such as, in the case of human beings, drugs, emotions, or conceptual relationships in antecedent mental occasions: it is then variously called delusion, or ecstatic vision, or imagination. Partial consciousness of this physical imagination is effected by the conceptual functioning of the mental pole.

Here an ambiguity arises, which has been disclosed by the modern physical theory of relativity. There are two available senses for "simultaneity." It may mean those occasions which are not causally related to occasion *A*, either as causing or caused. But it may mean those occasions which are prehended in *A* with presentational immediacy. If we identify these two meanings we are reduced to the classical view of time as strictly serial. If we hold that the presentationally immediate occasions are only some among the occasions which are not causally related, we can include the modern relativity-theory in this doctrine of time. But, apart from the paradox of non-seriality, the whole paper is directed to explain the relativistic conclusion that individual perceptivity is the ultimate physical fact.

VI. *Time as Epochal.* Supersession is not a continuous process of becoming. If we try to combine the notions of supersession and continuity we are at once entangled in a vicious infinite regress.

For if *B* supersedes *A*, then the continuity of *B* requires that some earlier portion of *B* has superseded *A* antecedently to the later portion of *B*. This argument can be repeated on that earlier portion of *B*, however you choose that portion. Thus we are involved in an infinite regress. Also the supersession of *A* has to commence at what should be the infinite end of the regress. But there is no infinite end. Hence supersession cannot be regarded as the continuous unfolding of a continuum. I express this conclusion by the statement that time is *epochal.* The occasion B which acquires concretion so as to supersede A embodies a definite quantum of time which I call the *epochal character* of the concrescence. The epochal theory of time is the foundation of the theory of atomic organisms, and of the modern physical quantum-theory.

I do not say that all the time-quanta involved in supersession are equal. But some time-quantum is always involved. But we could not even discuss the relative sizes of time-quanta unless these quanta were also divisible, and were also comparable in respect to their parts, thus elicited. For if time-quantum T_1 be greater than time-quantum T_2, it must mean that T_2 is comparable to some part of T_1 in respect to equality. Thus there is also a continuity in time, arising from indefinite divisibility. This continuity is an instance of the potentiality which is an essential element in the actual world. The epochs in the past are what they have been. But if we abstract from the realized self-enjoyment which is the individual residuum of each epochal occasion, that occasion, considered with the abstractions of physics, might have been subdivided into epochal occasions which together complete that one occasion. This is the potential supersession internal to each actual occasion. Thus there is no continuity of becoming, but there is a becoming of continuity.

The question of the extensive relation whereby time acquires its extensive character, termed "duration," and the question of the connection between temporal and spatial relations, and the question of the measurement of space-time, cannot be considered without extending this communication beyond its assigned limits.

THE ACQUISITIONS AND ENIGMAS OF THE PHILOSOPHY OF NATURE

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I

THE important results of the application of pure mathematics to the study of general physics (kinematics and mechanics) and of physics to the inorganic world have always been a prime source of great metaphysical movements. Consider, for example, the metaphysical revolution produced by the Pythagorean theorem, i.e., by the mathematical study of the right triangle. Again, the wonderful invention of the irrational has led to the destruction of the primitive naïve Pythagoreanism for which everything consisted of integers. Intimately combined with this invention and other geometrical studies, as we know from Plato's dialogues, was the theory that abstract notions and ideas are innate and given *a priori*. Two thousand years later the combination of experimental and observational dynamics with the invention of the infinitesimal calculus, that highest achievement of mathematical thought, led to the laws of Galileo and Newton, expressed in terms of a hypothetical absolute space and absolute time. These hypotheses, considered by Euler as necessary to the construction of analytical dynamics, became the fundamental notions of the *Kritik der reinen Vernunft*. The extraordinary influence of this work of Kant, that "Newtonian philosopher," cannot be too highly appreciated. All the different philosophies of the nineteenth century, however much they stand opposed to one another in other ways, agree in assuming the exceptional position of the problem of space and time. This is true equally of the idealistic systems immediately following upon Kant, and of the materialistic, mediately through the influence of Hegel. The only notable exceptions are those offered by that theory of knowledge the outlines of which we find in Mach, for whom "Farben, Töne, Drücke, Räume, Zeiten," are equally elements of the world, and before that, in the views of Lobatchewsky.

Now in the beginning of the twentieth century the success of physics, the study of the electromagnetic field and its expression in the form of Maxwell's equations, aided by the elaboration of the theory of groups of transformations and of absolute differential calculus (tensor analysis), have led to the new conception of the four-dimensional manifold. The group of transformations which leaves invariant the equations of motion given by Newton, and which corresponds to the Newtonian-Galilean principle of relativity, should be replaced by a new and more general group of transformations which leaves invariant the equations of Maxwell and consequently corresponds to the principle of relativity for electrical and optical phenomena.

This group of transformations as treated by Lorentz has the remarkable peculiarity that it correlates the numbers corresponding to the spatial measurements with a number corresponding to the time. Hence is derived the conception of the manifold of point-events, each defined by four numbers, as well as the mathematical expression of the space-time interval between two events.

The new stroke of Einstein's genius, the identification of the inertial with the gravitational mass, leads to the new equations of gravitation and of the propagation of light, as a consequence of the general (non-Euclidean) geometry of the four-dimensional manifold. We have here the application to the theory of this manifold of the methods which were earlier applied by Gauss and Riemann in geometry, and the new application of the principle of Klein, which identified geometry with the study of the groups of transformations which leave invariant any of the functions of the coördinates. We understand now clearly — and extend from space to the world of events — the paradoxical phrase of Lobatchewsky, that there is no space but only movements; and we can also extend from space to the world of events the no less paradoxical phrase of Poincaré, "space is a group."

In these last years there have appeared from time to time new experimental facts which seem to contradict and shake in its foundations the general theory of relativity. Such are, for instance, the experiments in the interference of light waves which Dr. Dayton Miller performed with the greatest care. These experiments seem to show the existence of an ether-drift resulting from the combined motion of earth, sun, and star-cluster.

But what has just been said about the relations between the general theory of relativity and the mathematical theory of groups of transformations shows the internal truth of the theory of relativity, which can neither be shaken by experiments nor troubled by paradoxes. Einstein's theory — his principle of covariancy — is only a new and great step taken by science in her perpetual efforts to express the laws of nature in a form which is independent of the choice of coördinates, or, what is the same thing, of the unobservable transformations of the manifold of events. As the laws of physics must be expressed in a form which is independent of the choice of the units of measure of space, time, and mass, i.e., of the unobservable changes of time, length, and mass, and must be therefore expressible in equations whose dimensions (in C. G. S.) are independent of any system of measurement; they must be also independent of the choice of different *codes* of coördinates. That can be realized only if they are expressed by tensors. "Our knowledge of conditions in the external world, as it comes to us through observations, is precisely the kind which can be expressed by the tensors and not otherwise" (Eddington).

This idea appeared unconsciously in the principle of identity of indiscernibles of Leibniz, in the minds of Laplace and Delboeuf. It was explained and applied to space with extraordinary clearness by Poincaré. All that he says in his beautiful article, "Rélativité de l'espace" (*Science et méthode*), can be extended to the manifold of events. Therefore we cannot deny the possibility of the most comprehensive generalizations of the original theory of Einstein, such as have already been proposed by Weyl, Eddington, Einstein himself, and others; we cannot deny the possibility of considerable alteration in detail as proposed by Dantzig in his remarkable article relating to the experiment of Dayton Miller.[1]

But what is accomplished is accomplished, namely, the necessary expression of the laws of nature in the form of tensors, perhaps in terms more general than those in vogue at present; in other words the geometry of the world of events.

We must also consider the conception of the manifold of events ("Chronotop") and Einstein's principle of covariancy as an indestructible and incontrovertible acquisition of the philosophy of nature, an acquisition with which all future metaphysics will have to reckon. Yet at the same time there is much which repels us from this new conception.

First, this conception radically contradicts our consciousness that all events occur in time, and that all material objects are placed in space, which, according to Weyl's happy expression, seems to be for them a "Mietkaserne." Moreover our mind cannot agree with the conception which intimately unites space and time and makes them both the shadows of an unknown and incomprehensible reality of a pan-mathematical character.

Secondly, beyond the limits of analysis of the chronotop, however far it may be elaborated with the aid of the most delicate and complex mathematical instruments, there will nevertheless remain the world of qualities, the world as it is presented to us with its often charming forms, colors, tones; with movements taking place in space and time; the world of the history of star-clusters, of our planet, of the animal and vegetable kingdoms; the world of Humanity.

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[1] *Mathematische Annalen*, Bd. 26, 1926.

And all these considerations likewise lead us to the great enigmas of space and time which, as we know from Kant, are the necessary presuppositions (*Vorbedingung*) of all our experimental knowledge (*Erfahrung*). Here come into closest contact the points of view of physics and metaphysics; or, more exactly, the rôle of physics comes to an end and metaphysics must take its place. Metaphysics stands face to face with the problem of reconciling the acquisition of the theory of relativity with that acknowledgment of space and time which appears unavoidable for our consciousness. It would require a voluminous and comprehensive report to present the relations of the different contemporary philosophical schools to the fact of the general theory of relativity. I shall confine myself to the outlines.

Contemporary metaphysics solves the important problem offered by the theory of relativity in different ways. It may deny absolutely this new acquisition of the philosophy of nature on the ground of the insufficiency and invalidity of its physical data (common-sense materialism), or it may declare the theory to be only a mathematical fiction having no relation to reality (*Als-ob* philosophy), or it tries to reconcile it with the aprioristic philosophy of Kant (Marburg philosophical school), or else it sees in the theory only the continuation of the endeavor of science to reduce everything to spatial considerations (Meyerson).

It seems to me that not sufficient attention is given to those biological considerations whose significance for any theory of space and time was made evident by Herbert Spencer and Mach; nor sufficient weight to the incontestable fact that man is but the last link attached to a long chain of ancestry going back to the amoeba, that we must seek the solution of the enigmas which interest us not only in physical laboratories, but also in those of animal psychology and comparative physiology, in the clinics where are treated persons with brain lesions, in the study of the capacities of anthropoid apes, such as the Teneriffe apes of W. Köhler, and of savages, such as the inhabitants of New Guinea, who, according to Thurnwald, cannot count beyond three.

II

What is taught by comparative biology? In the three lowest classes of animals (Protozoa, Porifera, Coelenterata) we meet only the elementary tropisms which are common not only to the plants but also to the inorganic mixtures of Bütschli and Rhumbler. In the lowest of these organisms we find only a general irritability of the protoplasm, which responds similarly to different stimuli, mechanical, chemical, photic, and thermal. But the higher we ascend in the scale of animal development, the more we meet with differentiation of sense-organs (receptors) for different stimuli; we find already in the protozoa the beginning of photo-receptors (the pigment cellules of *Euglena viridis*), of kinaesthetic organs, and of organs of touch (hairs of Hypotricha). In the Coelenterata (Charinidae) we find a composite eye. Uexküll very acutely compares this transition from the general irritability of the whole protoplasm to the differentiation of special organs with the transition which was made by the human race from the primitive methods of making fire to the modern safety match.

With Uexküll we have put the question: What is the world of these animals? (*Umwelt* of Uexküll, receptive range of Sherrington). Is it not true that they live only in the world of events where there is neither space, nor time, nor material objects with their forms and colors? Does not their *Umwelt* consist only of the positive and negative reaction toward and away-from (*heran* and *fort*), caused by bright and dark places, by mechanical pressures, or by chemical agents? We must suppose a different world in Echinodermata, in Vermes, and in Mollusca, where we find the beginnings of a nervous system and of musculature. Here the complexes of things begin to separate out; first, the perception of moving things; then the perception of forms (moto-reception and icono-reception). "Die Umwelt auflöst sich in räumliche Komplexe," says Uexküll. While in Echinodermata there is no coördination of the whole, and the typical representative of them is a "republic of reflexes," in Vermes, as was originally shown by Darwin, we find the reception of form, the searching out of individuals of the other sex, the construction of channels for life, and the feeding and defense of their progeny. In Mollusca we find an extraordinary faculty of orientation. In the higher Mollusca (Cephalopoda) is to be found a wonderful development of the organ of sight (25 % of the weight of the whole animal, while in man it is only $\frac{1}{40}$ of 1 %).

This development of the sense-organs and of the *Umwelt* of these higher animals depends partly upon their bilateral form and still more upon the development of their mobility, as was affirmed especially by Demolle and Szymansky. Involuntarily there come to mind the words of Berkeley in the end of his Analyst, "Question 12. Whether it be possible that we should have had an idea or notion of extension prior to motion? Or whether, if a man never perceived motion, he would ever have known or conceived one thing to be distant from another?"

And then come the two highest stages of the evolution of the animal world: Insecta and Vertebrata. In them, concomitant with the evolution of receptors and of the integrative action of the central nervous system, the behavior of the animal advances and, as we should presume, the power of perception and discrimination increases. In them likewise locomotion and distance-receptivity — that necessary condition for the perception of physiological space — are "two phenomena so fundamentally correlated that the physiology of neither can be comprehended without recognition of the correlation of the two" (Sherrington).

In higher Insecta we find the marvelous composite eye, the sense of odor which explains their orientation, the sense of taste which in ants replaces language, and the beginning of the formation of general notions. In the highest Vertebrata — man — we have in the cerebrum and especially in the cerebral cortex the latest and highest expression of a mechanism, corresponding to those psychic faculties of man which have given him dominance over nature and the capacity of solving her enigmas.

Not all the senses are more developed in man than in other Vertebrata. We have not the wonderful sense of taste of the bats, the olfactory sense of dogs and horses, nor those not fully investigated senses which give to birds and certain other animals their marvelous faculty of orientation. The interesting experiments of Pavlov's school teach us that the power of discriminating musical tones is much more developed in a dog than in a man. But two organs of man and the higher animals seem to lead especially to the biological differentiation of the world of events, to the perception of what was called physiological space, namely, the eye and the labyrinth of the ear.

The studies of this, initiated by Berkeley, were continued by Helmholtz, Hering, Sherrington (see last pages of his *Integrative Action of the Nervous System*), and many others. The study of vision seems to be more nearly finished than the study of the labyrinth of the ear with its mutually orthogonal semicircular canals, and its appearance resembling the system of Cartesian orthogonal coördinates. The study of this organ was initiated by the experiments of Flourens (1828–1842); after him it was the object of study of many eminent physiologists. The majority of them see in the labyrinth only the organ of equilibrium of the head, which shows us only the *changes* of position and of movement of the animal. Sherrington says, "the labyrinthian receptors give the animal its definite attitude to the external world."

But there is another opinion on the significance of the semicircular canals. This opinion was first expressed by the Russian physiologist, E. Cyon, as a result of his prolonged experiments and observations, and he insisted on it in many articles and books. (*Thèse de Paris*, 1878. *Das Ohrlabyrinth als Organ für mathematische Sinne für Raum und Zeit*, 1908. *L'Oreille*, Paris, 1911.) Cyon considers the canals as the organs of the sense of space. He was sure that he had solved definitively the problems of space and had given the physiological foundations for Euclidean geometry. He was confirmed in his opinion by the experiments of Dr. B. Rawitz on the dancing mice of Japan, which have but two pairs of semicircular canals. Rawitz likewise was a fervent disciple of Cyon's idea and expressed his opinion in these words: "Raum und Zeit sind Functionen unseres Körpers" (1909). In recent years the eminent German biologist, Uexküll, in his *Theoretische Biologie* (Berlin, 1920), likewise sees in the canals the nearest connection with the perception of three dimensions of space.

But, as I have said, the majority of physiologists do not share the opinion of Cyon, Rawitz, and Uexküll. Poincaré expressed some interesting considerations on this matter in his book, *La Valeur de la Science*. In any case, there is something problematic in this coincidence of three orthogonal semicircular canals with three dimensions of space. This question is at the same time connected with another question much discussed by physiologists. Is the formation of stimuli and consequently of the corresponding organs due only to the *changes* in the external world or can the *reality* of the external world itself produce adaptation of the organs? In this last case we can consider the semicircular canals as an adaptation to a three dimensional world, and thereby receive a key for resolving the problem of three dimensions, which interested Kant and after him Schelling. A similar question was raised relative to terrestrial gravity and the significance of statocysts. Verworn denied the possibility of the geotropisms because terrestrial gravity is constant. But this opinion seems not to be generally admitted and we can, with Loeb, consider as a cause of physiological excitation not only the changes and differences but also the action of constant conditions (*Wirksamkeit konstanter Umgebungsbedingungen*), and with Kafka (*Sinn der Wirbellosen*, S. 155) consider it necessary to change the usual definition of stimuli. The question is evidently connected with the question of the structure and the function of the organs and their mutual dependence. "La vie est un cercle vicieux." This clever phrase of Boutroux can be applied also to this situation, which, as we see, is intimately connected with the highest problems of contemporary biology and, like all these problems, is full of riddles.

III

The ideas of ancient Aryan cosmogony about the cycles of returning events, reappearing in the dreams of a Greek philosopher, of Blanqui, and of Nietzsche, in the ingenious Fechner's *Paradoxes of Dr. Mises*, vanished, — put to rout by one of the greatest acquisitions of the science of the nineteenth century, that connected with the name of Sadi Carnot, the principle of the degradation of energy or of the increase of the entropy in irreversible processes. Life, evolution of the animal world, and the history of humanity are such irreversible processes. The idea of time is most intimately associated with such processes. Namely, here we have an essential difference between space and time, and it is this difference which chiefly repels us from the fundamental idea of the theory of relativity, from the conception of the chronotop. We can have free mobility (the diffuse extension of Professor Weyl?) in space; we do not have it in time. The theory of relativity, which affirms the exceptional position of entropy, cannot shake our inmost conviction that we ourselves and the animals do not proceed from death through senility and youth to birth, that the October revolution of 1917 could not precede the emancipation of serfs in Russia. In the faculty of looking backward into remote antiquity and forward into the future lies the greatness of Man and his prodigious difference from the animals. The animal was justly named by one physiologist, "Augenblickswesen," and Count Korzybsky is justified in seeing the essential characteristic of man in "time-binding." As the world of lower animals is only the world of events, the animals know only *now*. Only in higher stages does there develop the conception of *before* and *after*.

The evolution of these conceptions, as we can presume, runs parallel to the evolution of the "associative memory." We do not wish to fix our attention on the question of the memory of inorganic matter, the phenomena of hysteresis in colloids, in metals, in played violins, etc., and of the memory of plants. These questions, as well as that of the evolution of memory in the animal world, are clearly expounded in Piéron's book, *L'évolution de la mémoire*. The reader will find therein that the Actinaria and Convoluta, accustomed to close themselves in the sea upon the approach of flood-tide, close themselves at the same time when placed in the aquarium; he will find in books on comparative psychology descriptions of the labyrinth-experiments which show similarly the memory of crabs, which can be trained as the "thinking horses" of Osten and Knoll are trained.

The evolution of what can be called time runs parallel to the evolution of space and of the conception of distinct material objects. And in this perfect parallelism lies, it seems to me, the cause of different opinions about the priority of the perception of time or the perception of space. While Spencer insisted on the opinion that the notion of time precedes the notion of space, Guyot and Bergson, with equal cogency, see in the intuition of space the way which leads into the representation of time.

The time whereof we speak is physiological time, and is intimately associated with the rhythmic processes that take place in our bodies. But very important and much discussed questions arise in connection with physiological time. Is there a special sense-organ associated therewith, as the eye and perhaps the semicircular canals are associated with the perception of space, or is it a "Generalsinn," as E. Weber and Vierordt would have us believe? Cyon, delighted at having found the organ of the perception of space, was inclined to see in the combination of semicircular canals and Corti's fibers the special organ of time. This view seems to be paradoxical and, as far as we know, is not shared by any scientist.

Another important question is the question of the relations between physiological and physical (metrical) time. Physical time, i.e., the time which we measure on our clocks, the time which figures in the formulae of the special theory of relativity, is one of the most important products of the human faculty of observing and experimenting. One of the oldest mediaeval scientists, Sacro Bosco or John Holyhood (twelfth century), names this time "mathematical time," and says of it: "tempus mathematicorum nascitur cum solis occasu." In Eddington's clever phrase, "time as we understand it now was discovered by Rœmer." This time became the absolute time of aprioristic philosophy. The essential difference between physical and physiological time is clear to everyone.

K. E. Baer, who first indicated the connection of physiological time with rhythmic processes, suggests in his very interesting lecture, "Welche Aufassung der Natur ist die richtigste?" different species of animals whose pulses and arteries beat very differently. One of them is short-lived and during all his life the sun stays at the same point in the heaven; another, on the contrary, during the same number of pulsations, sees the seasons of the year change with great velocity. Baer represents then different physiological times, supposing that the time of physical events remains unchanged. These ideas are dictated not only by the imagination but by the new successes of biology and give to the question of the relation between physiological and physical time a special interest. Such are the above-mentioned observations of Piéron on the Actinaria and Convoluta; such are the experiments made by the scientists of Pavlov's school relating to the influence of physical time (beatings of a metronome on the excitation of conditioned reflexes).

Up to this point we have considered only the enigmas which seem to us closely connected with the conception of the chronotop and with the general theory of relativity. Another great acquisition of modern physics, the theory of quanta, puts before us still more radically than the theory of entropy the enigmas of space and time. Our bodies and our sense-organs are things. All that we apprehend with our senses are things and events in the macrocosm. The theory of quanta obliges us to descend to the microcosm and there arises a question: Are the notions which are necessary for our knowledge and action in the macrocosm still necessary for the microcosm? Bohr expresses his opinion in these words, "We are not at all justified in assuming that our human ways of thinking are suitable ways of thinking of atomic motion. Our human ways of thinking are bound up inextricably with our intuitions of space and time and *atomic action may not take place in what we call space and time.*"

The same view was expressed by Professor Franklin in 1924 and in these last months by Norman Campbell, who suggests the idea that time may, like temperature, be only a statistical fact. We see how immense are the enigmas of space and time. At the same time Vierordt is quite right in saying that these enigmas are the highest problems of the philosophy of "nature." In such problems any step, be it ever so little, each hypothesis, be it ever so disputable, still has unquestionable value. *In magnis voluisse sat est.*

THE OBJECTIVE REALITY OF PERSPECTIVES

G. H. Mead
(*Chicago*)

THE grandiose undertaking of Absolute Idealism to bring the whole of reality within experience failed. It failed because it left the perspective of the finite ego hopelessly infected with subjectivity and consequently unreal. From its point of view the theoretical and practical life of the individual had no part in the creative advance of nature. It failed also because scientific method, with its achievements of discovery and invention, could find no adequate statement in its dialectic. It recognized the two dominant forces of modern life, the creative individual and creative science only to abrogate them as falsifications of the experience of the absolute ego. The task remained unfulfilled, the task of restoring to nature the characters and qualities which a metaphysics of mind and a science of matter and motion had concurred in relegating to consciousness, and of finding such a place for mind in nature that nature could appear in experience. A constructive restatement of the problem was presented by a physiological and experimental psychology that fastened mind inextricably in an organic nature which both science and philosophy recognized. The dividend which philosophy declared upon this restatement is indicated in William James's reasoned query "Does Consciousness exist?" The metaphysical assault upon the dualism of mind and nature, that has been becoming every day more intolerable, has been made in regular formation by Bergson's evolutionary philosophy, by neo-idealism, by neo-realism, and by pragmatism. And no one can say as yet that the position has been successfully carried.

I wish to call attention to two unconnected movements which seem to me to be approaching a strategic position of great importance — which may be called the objectivity of perspectives. These two movements are, first, that phase of behavioristic psychology which is planting communication, thinking, and substantive meanings as inextricably within nature as biological psychology has placed general animal and human intelligence; and second, an aspect of the philosophy of relativism which Professor Whitehead has presented.

Professor Whitehead interprets relativity in terms of events passing in a four-dimensional Minkowski world. The order in which they pass, however, is relative to a consentient set. The consentient set is determined by its relation to a percipient event or organism. The percipient event establishes a lasting character of here and there, of now and then, and is itself an enduring pattern. The pattern repeats itself in the passage of events. These recurrent patterns are grasped together or prehended into a unity, which must have as great a temporal spread as the organism requires to be what it is, whether this period is found in the revolutions of the electrons in an iron atom or in the specious present of a human being. Such a percipient event or organism establishes a consentient set of patterns of events that endure in the relations of here and there, of now and then, through such periods or essential epochs, constituting thus slabs of nature, and differentiating space from time. This perspective of the organism is then there in nature. What in the perspective does not preserve the enduring character of here and there, is in motion. From the standpoint of some other organism these moving objects may be at rest, and what is here at rest will be, in the time system of this other perspective, in motion. In Professor Whitehead's phrase, in so far as nature is patient of an organism, it is stratified into perspectives, whose intersections constitute the creative advance of nature. Professor Whitehead has with entire success stated the physical theory of relativity in terms of intersecting time systems.

What I wish to pick out of Professor Whitehead's philosophy of nature is this conception of nature as an organization of perspectives, which are there in nature. The conception of the perspective as there in nature is in a sense an unexpected donation by the most abstruse physical science to philosophy. They are not distorted perspectives of some perfect patterns, nor do they lie in consciousnesses as selections among things whose reality is to be found in a noumenal world. They are in their interrelationship the nature that science knows. Biology has dealt with them in terms of forms and their environments, and in oecology deals with the organization of environments, but it has conceded a world of physical particles in absolute space and time that is there in independence of any environment of an organism, of any perspective. Professor Whitehead generalizes the conception of organism to include any unitary structure, whose nature demands a period within which to be itself, which is therefore not only a spatial but also a temporal structure, or a process. Any such structure stratifies nature by its intersection into its perspective, and differentiates its own permanent space and time from the general passage of events. Thus the world of the physical sciences is swept into the domain of organic environments, and there is no world of independent physical entities out of which the perspectives are merely selections. In the place of such a world appear all of the perspectives in their interrelationship to each other.

I do not wish to consider Professor Whitehead's Bergsonian edition of Spinoza's underlying substance that individualizes itself in the structure of the events, nor his Platonic heaven of eternal objects where lie the hierarchies of patterns, that are there envisaged as possibilities and have ingression into events, but rather his Leibnizian filiation, as it appears in his conception of the perspective as the mirroring in the event of all other events. Leibniz made a psychological process central in his philosophy of nature. The contents of his monads were psychical states, perceptions, and *petites perceptions*, which were inevitably representative of the rest of the reality of the universe of which they were but partially developed expressions. The represented content of all monads was identical, in so far as it was clear and distinct, so that the organization of these perspectives was a harmony preëstablished in an identity of rational content. Professor Whitehead's principle of organization of perspectives is not the representation of an identical content, but the intersection by different time systems of the same body of events. It is, of course, the abandonment of simple location as the principle of physical existence, i.e., that the existence of a physical object is found in its occupancy of a certain volume of absolute space in an instant of absolute time; and the taking of time seriously, i.e., the recognition that there are an indefinite number of possible simultaneities of any event with other events, and consequently an indefinite number of possible temporal orders of the same events, that make it possible to conceive of the same body of events as organized into an indefinite number of different perspectives.

Without undertaking to discuss Professor Whitehead's doctrine of the prehension into the unity of the event of the aspects of other events, which I am unable to work out satisfactorily, from the summary statements I have found in his writings, I wish to consider the conception of a body of events as the organization of different perspectives of these events, from the standpoint of the field of social science, and that of behavioristic psychology.

In the first place, this seems to be exactly the subject matter of any social science. The human experience with which social science occupies itself is primarily that of individuals. It is only so far as the happenings, the environmental conditions, the values, their uniformities and laws enter into the experience of individuals as individuals that they become the subject of consideration by these sciences. Environmental conditions, for example, exist only in so far as they affect actual individuals, and only as they affect these individuals. The laws of these happenings are but the statistical uniformities of the happenings to and in the experiences of A, B, C, and D. Furthermore the import of these happenings and these values must be found in the experiences of these individuals if they are to exist for these sciences at all.

In the second place, it is only in so far as the individual acts not only in his own perspective but also in the perspective of others, especially in the common perspective of a group, that a society arises and its affairs become the object of scientific inquiry. The limitation of social organization is found in the inability of individuals to place themselves in the perspectives of others, to take their points of view. I do not wish to belabor the point, which is commonplace enough, but to suggest that we find here an actual organization of perspectives, and that the principle of it is fairly evident. This principle is that the individual enters into the perspectives of others, in so far as he is able to take their attitudes, or occupy their points of view.

But while the principle is a commonplace for social conduct, its implications are very serious if one accepts the objectivity of perspectives, and recognizes that these perspectives are made up of other selves with minds; that here is no nature that can be closed to mind. The social perspective exists in the experience of the individual in so far as it is intelligible, and it is its intelligibility that is the condition of the individual entering into the perspectives of others, especially of the group. In the field of any social science the objective data are those experiences of the individuals in which they take the attitude of the community, i.e., in which they enter into the perspectives of the other members of the community. Of course the social scientist may generalize from the standpoint of his universe of discourse what remains hopelessly subjective in the experiences of another community, as the psychologist can interpret what for the individual is an unintelligible feeling. I am speaking not from the standpoint of the epistemologist, nor that of the metaphysician. I am asking simply what is objective for the social scientist, what is the subject matter of his science, and I wish to point out that the critical scientist is only replacing the narrower social perspectives of other communities by that of a more highly organized and hence more universal community.

It is instructive to note that never has the character of that common perspective changed more rapidly than since we have gained further control over the technique by which the individual perspective becomes the perspective of the most universal community, that of thinking men, that is, the technique of the experimental method. We are deluded, by the ease with which we can, by what may be fairly called transformation formulae, translate the experience of other communities into that of our own, into giving finality to the perspective of our own thought; but a glance at the bewildering rapidity with which different histories, i.e., different pasts have succeeded each other, and new physical universes have arisen, is sufficient to assure us that no generation has been so uncertain as to what will be the common perspective of the next. We have never been so uncertain as to what are the values which economics undertakes to define, what are the political rights and obligations of citizens, what are the community values of friendship, of passion, of parenthood, of amusement, of beauty, of social solidarity in its unnumbered forms, or of those values which have been gathered under the relations of man to the highest community or to God. On the other hand there has never been a time at which men could determine so readily the conditions under which values, whatever they are, can be secured. In terms of common conditions, by transformation formulae, we can pass from one value field to another, and thus come nearer finding out which is more valuable, or rather how to conserve each. The common perspective is comprehensibility, and comprehensibility is the statement in terms of common social conditions.

It is the relation of the individual perspective to the common perspective that is of importance. To the biologist there is a common environment of an ant hill or of a beehive, which is rendered possible by the intricate social relationships of the ants and the bees. It is entirely improbable that this perspective exists in the perspectives of individual ants or bees, for there is no evidence of communication. Communication is a social process whose natural history shows that it arises out of cöoperative activities, such as those involved in sex, parenthood, fighting, herding, and the like, in which some phase of the act of one form, which may be called a gesture, acts as a stimulus to others to carry on their parts of the social act. It does not become communication in the full sense, i.e., the stimulus does not become a significant symbol, until the gesture tends to arouse the same response in the individual who makes it that it arouses in the others. The history of the growth of language shows that in its earlier stages the vocal gesture addressed to another awakens in the individual who makes the gesture not simply the tendency to the response which it calls forth in the other, such as the seizing of a weapon or the avoiding of a danger, but primarily the social rôle which the other plays in the coöperative act. This is indicated in the early play period in the development of the child, and in the richness in social implication of language structures in the speech of primitive peoples.

In the process of communication the individual is an other before he is a self. It is in addressing himself in the rôle of an other that his self arises in experience. The growth of the organized game out of simple play in the experience of the child, and of organized group activities in human society, placed the individual then in a variety of rôles, in so far as these were parts of the social act, and the very organization of these in the whole act gave them a common character in indicating what he had to do. He is able then to become a generalized other in addressing himself in the attitude of the group or the community. In this situation he has become a definite self over against the social whole to which he belongs. This is the common perspective. It exists in the organisms of all the members of the community, because the physiological differentiation of human forms belongs largely to the consummatory phase of the act.

The overt phase within which social organization takes place is occupied with things, physical things or implements. In the societies of the invertebrates, which have indeed a complexity comparable with human societies, the organization is largely dependent upon physiological differentiation. In such a society, evidently, there is no phase of the act of the individual in which he can find himself taking the attitude of the other. Physiological differentiation, apart from the direct relations of sex and parenthood, plays no part in the organization of human society. The mechanism of human society is that of bodily selves who assist or hinder each other in their coöperative acts by the manipulation of physical things. In the earliest forms of society these physical things are treated as selves, i.e., those social responses, which we can all detect in ourselves to inanimate things which aid or hinder us, are dominant among primitive peoples in the social organization that depends on the use of physical means. The primitive man keeps *en rapport* with implements and weapons by conversation in the form of magic rites and ceremonies. On the other hand the bodily selves of members of the social group are as clearly implemental as the implements are social. Social beings are things as definitely as physical things are social.

The key to the genetic development of human intelligence is found in the recognition of these two aspects. It arises in those early stages of communication in which the organism arouses in itself the attitude of the other and so addresses itself and thus becomes an object to itself, becomes in other words a self, while the same sort of content in the act constitutes the other that constitutes the self. Out of this process thought arises, i.e., conversation with one's self, in the rôle of the specific other and then in the rôle of the generalized other, in the fashion I indicated above. It is important to recognize that the self does not project itself into the other. The others and the self arise in the social act together. The content of the act may be said to lie within the organism but it is projected into the other only in the sense in which it is projected into the self, a fact upon which the whole of psycho-analysis rests. We pinch ourselves to be sure that we are awake as we grasp an object to be sure that it is there. The other phase of human intelligence is that it is occupied with physical things. Physical things are perceptual things. They also arise within the act. This is initiated by a distant stimulus and leads through approximation or withdrawal to contact or the avoidance of contact. The outcome of the act is in consummation, e.g., as in eating, but in the behavior of the human animal a mediate stage of manipulation intervenes. The hand fashions the physical or perceptual thing. The perceptual thing is fully there in the manipulatory area, where it is both seen and felt, where is found both the promise of the contact and its fulfilment, for it is characteristic of the distant stimulation and the act that it initiates that there are already aroused the attitudes of manipulation, — what I will call terminal attitudes of the perceptual act, that readiness to grasp, to come into effective contact, which in some sense control the approach to the distant stimulation. It is in the operation with these perceptual or physical things which lie within the physiological act short of consummation that the peculiar human intelligence is found. Man is an implemental animal. It is mediate to consummation. The hand carries the food to the mouth, or the child to the breast, but in the social act this mediation becomes indefinitely complicated, and the task arises of stating the consummation, or the end, in terms of means. There are two conditions for this: one is the inhibition, which takes place when conflicting ways of completing the act check the expression of any one way, and the other is the operation of the social mechanism, which I have described, by which the individual can indicate to others and to himself the perceptual things that can be seized and manipulated and combined.

It is within this field of implemental things picked out by the significant symbols of gesture, not in that of physiological differentiation, that the complexities of human society have developed. And, to recur to my former statement, in this field selves are implemental physical things just as among primitive peoples physical things are selves.

My suggestion was that we find in society and social experience, interpreted in terms of a behavioristic psychology, an instance of that organization of perspectives, which is for me at least the most obscure phase of Professor Whitehead's philosophy. In his objective statement of relativity the existence of motion in the passage of events depends not upon what is taking place in an absolute space and time, but upon the relation of a consentient set to a percipient event. Such a relation stratifies nature. These stratifications are not only there in nature but they are the only forms of nature that are there. This dependence of nature upon the percipient event is not a reflection of nature into consciousness. Permanent spaces and times, which are successions of these strata, rest and motion, are there, but they are there only in their relationship to percipient events or organisms. We can then go further and say that the sensuous qualities of nature are there in nature, but there in their relationship to animal organisms. We can advance to the other values which have been regarded as dependent upon appetence, appreciation, and affection, and thus restore to nature all that a dualistic doctrine has relegated to consciousness, since the spatio-temporal structure of the world and the motion with which exact physical science is occupied is found to exist in nature only in its relationship to percipient events or organisms.

But rest and motion no more imply each other than do objectivity and subjectivity. There are perspectives which cease to be objective, such as the Ptolemaic order, since it does not select those consentient sets with the proper dynamical axes, and there are those behind the mirror and those of an alcoholic brain. What has happened in all of these instances, from the most universal to the most particular, is that the rejected perspective fails to agree with that common perspective which the individual finds himself occupying as a member of the community of minds, which is constitutive of his self. This is not a case of the surrender to a vote of the majority, but the development of another self through its intercourse with others and hence with himself.

What I am suggesting is that this process, in which a perspective ceases to be objective, becomes if you like subjective, and in which new common minds and new common perspectives arise, is an instance of the organization of perspectives in nature, of the creative advance of nature. This amounts to the affirmation that mind as it appears in the mechanism of social conduct is the organization of perspectives in nature and at least a phase of the creative advance of nature. Nature in its relationship to the organism, and including the organism, is a perspective that is there. A state of mind of the organism is the establishment of simultaneity between the organism and a group of events, through the arrest of action under inhibition as above described. This arrest of action means the tendencies within the organism to act in conflicting ways in the completion of the whole act. The attitude of the organism calls out or tends to call out responses in other organisms, which responses, in the case of human gesture, the organism calls out in itself, and thus excites itself to respond to these responses. It is the identification of these responses with the distant stimuli that establishes simultaneity, that gives insides to these distant stimuli, and a self to the organism. Without such an establishment of simultaneity, these stimuli are spatio-temporally distant from the organism, and their reality lies in the future of passage. The establishment of simultaneity wrenches this future reality into a possible present, for all our presents beyond the manipulatory area are only possibilities, as respects their perceptual reality. We are acting toward the future realization of the act, as if it were present, because the organism is taking the rôle of the other. In the perceptual inanimate object the organic content that survives is the resistance that the organism both feels and exerts in the manipulatory area. The actual spatio-temporal structure of passing events with those characters which answer to the susceptibilities of the organism are there in nature, but they are temporally as well as spatially away from the organism. The reality awaits upon the success of the act. Present reality is a possibility. It is what would be if we were there instead of here. Through the social mechanism of significant symbols the organism places itself there as a possibility, which acquires increasing probability as it fits into the spatio-temporal structure and the demands of the whole complex act of which its conduct is a part. But the possibility is there in nature, for it is made up of actual structures of events and their contents, and the possible realizations of the acts in the form of adjustments and readjustments of the processes involved. When we view them as possibilities we call them mental or working hypotheses.

I submit that the only instance we have of prehension in experience is this holding together of future and past as possibilities — for all pasts are as essentially subject to revision as the futures, and are, therefore, only possibilities — and the common content which endures is that which is common to the organism and environment in the perspective. This in the organism is identified with the spatio-temporally distant stimuli as a possibly real present, past, and future. The unity lies in the act or process, the prehension is the exercise of this unity, when the process has been checked through conflicting tendencies, and the conditions and results of these tendencies are held as possibilities in a specious present.

Thus the social and psychological process is but an instance of what takes place in nature, if nature is an evolution, i.e., if it proceeds by reconstruction in the presence of conflicts, and if, therefore, possibilities of different reconstructions are present, reconstructing its pasts as well as its futures. It is the relativity of time, that is, an indefinite number of possible orders of events, that introduces possibility in nature. When there was but one recognized order of nature, possibility had no other place than in the mental constructions of the future or the incompletely known past. But the reality of a spatio-temporally distant situation lies ahead, and any present existence of it, beyond the manipulatory area, can be only a possibility. Certain characters are there, but what *things* they are can only be realized when the acts these distant stimulations arouse are completed. What they are now is represented by a set of possible spatio-temporal structures. That these future realizations appear as present possibilities is due to the arrest of the act of the organism, and its ability to indicate these possibilities.

That these possibilities have varying degrees of probability is due to the relation of the various inhibited tendencies in the organism to the whole act. The organization of this whole act the human social organism can indicate to others and to itself. It has the pattern which determines other selves and physical things, and the organism as a self and a thing, and the meanings which are indicated have the universality of the whole community to which the organism belongs. They constitute a universe of discourse. It is the fitting in of the particular tendencies into this larger pattern of the whole process that constitutes the probability of the present existence of the things which any one act implies. Its full reality is still dependent upon the accomplishment of the act, upon experimental evidence. It is then such a coincidence of the perspective of the individual organism with the pattern of the whole act in which it is so involved that the organism can act within it, that constitutes the objectivity of the perspective.

The pattern of the whole social act can lie in the individual organism because it is carried out through implemental things to which any organism can react, and because indications of these reactions to others and the organism itself can be made by significant symbols. The reconstruction of the pattern can take place in the organism, and does take place in the so-called conscious process of mind. The psychological process is an instance of the creative advance of nature.

In living forms lower than man the distant perspective may through sensitivity exist in the experience of the form and the grasping of this in the adjustments of conduct answer to the formation of the stratification of nature, but the reconstruction of the pattern within which the life of the organism lies does not fall within the experience of the organism. In inanimate organisms the maintenance of a temporal structure, i.e., of a process, still stratifies nature, and gives rise to spaces and times, but neither they nor the entities that occupy them enter as experiential facts into the processes of the organisms. The distinction of objectivity and subjectivity can only arise where the pattern of the larger process, within which lies the process of the individual organism, falls in some degree within the experience of the individual organism, i.e., it belongs only to the experience of the social organism.

SECTION 2

Time: Wednesday, September 15, 9.30 A.M.
Place: Gore Hall Dining Room
Subject: Philosophy of Religion, with Special Reference to Mysticism in East and West
Chairmen: FELIX ADLER, Columbia
JAMES B. PRATT, Williams

AN EMPIRICAL STUDY OF MYSTICISM

EDWIN D. STARBUCK

(*State University of Iowa*)

FOR three centuries and more the Western world has witnessed the rise and spread of empirical methods of research. One after another the several sciences, — astronomy, physics, chemistry, biology, psychology, — have split off from the parent stem of philosophy. The original trunk from which these branches have separated and then struck root with independent existences stands stark except for the branches that are high in the air of abstract thinking. There still remain to philosophy besides three theoretical disciplines, — ontology, cosmology, and epistemology, — only about four healthy branches, namely, logic, ethics, aesthetics, and religion. These four branches have to do with human values, the things men live by. They will become the most fruitful of branches provided there is health enough left in the parent stock to support them. Otherwise philosophy will be threatened with extinction.

To change the figure, if one should personalize philosophy and speak of it as possessing a domain, there yet remain to it four great fertile fields. She may keep them as her own if she will adopt modern appliances in cultivating her estates. Otherwise they will become independent spheres of interest or will be appropriated altogether, as is now threatened, by psychology and sociology. Philosophy like theology has to the present remained strangely unaffected by the trend of the centuries and has been unchallenged by the unprecedented success of all departments of thought that have adopted scientific methods. It is to the credit of the psychology of religion that from its inception it has been addicted to empirical rather than dogmatic and merely rational habits of mind. It has had, like all true sciences, respect for fact as such while the parent disciplines have shown an unfailing disposition to collect and use facts in the support of some preconceived doctrine or dogma. These first hand data the psychology of religion has found chiefly in the personal life of the devotees of religion. It is concerned with the interpretation of the immediate facts of experience, preferably by objective methods such as characterize the more exact sciences. In this respect it differs from sociology and anthropology whose primary concern is with religious customs and usages and the crystallized forms of religious experience as expressed in institutions, rites, creeds, and doctrines. It stands almost diametrically opposed to theology and pure philosophy that employ apriori principles for the preservation of the integrity of conceptual systems.

The empirical study of religion does not forsake logic as a tool of science. Quite the contrary. It liberates the logical functions. In playing fact against fact, in building manifold hypotheses at every turn to explain and interpret its data, it sets free the thought processes. It emancipates them from the hardness and finality of deductive syllogistic methods and renders them plastic, pliable, and effective.

The psychology of religion, it must be confessed, has hitherto been rather lame in its technique as compared with the exacter sciences. It has been too much given to trusting its powers of accurate observation and of faithful interpretation unaided by objective control. The time is overripe for the discovery and adoption of more refined methods. The study of which this sketch is a preliminary report can justify itself, if at all, as an illustration of a possible advance in technique, as well as containing a suggestion of some tentative results of research. It is the outcome of some studies made at the University of Iowa during the past two years by R. D. Sinclair, T. H. Howells, Dr. Frank K. Shuttleworth, and the writer of these notes. The object of these studies is to psychologize certain outstanding modes of religious behavior or types of personality.

The present study is an excursus into the understanding of that religious attitude designated roughly (quite too generally) as that of the "mystic," as contrasted with the non-mystic. Mr. Sinclair is more particularly held responsible for this part of the research. It was found possible to differentiate with a reasonable degree of reliability from amongst a large representative group of students those who have the feeling of rapport with a divine presence as contrasted with those who are partially or wholly lacking in that experience.

Having found a satisfactory number of persons representing these opposite types the problem is to draw, so to say, a composite picture of the one sort of human being as contrasted with its opposite. In other words, the object is to find the setting in the variety of mental and bodily traits of this particular kind of religious experience, or, to find what the mystical attitude means when seen in its relation to a considerable variety of mental qualities and abilities.

The method of differentiating the groups was by the use of a newly devised self-rating scale like the following:

Very dark hair	. . . : . . √	Very light hair
Always healthful	. . . : √ . .	Extremely delicate in health
Enjoy vulgar stories	. . √ : . . .	Disgusted with vulgar stories
Sympathetic with doctrines of church	√ . . : . . .	Antagonistic to doctrines of the church
Use tobacco habitually	. . . : . √ .	Conscientiously opposed to it
God seems remote	. √ . : . . .	God seems near
etc.		etc.

Students were instructed to rate themselves by checking upon that dot, or the colon, which will best represent their position on the scale between the pairs of opposite traits. Thus, a person with very light hair would check to the extreme right of the scale.

There were more than one hundred and fifty items in all. Those supposed to portray a given attitude or quality to be studied were several times repeated with different wording and were scattered promiscuously throughout the list. They were intermittently reversed as to placing on the right or left of the sheet. The task was usually done in less than twenty minutes. The subjects almost invariably came out of it zestfully as if it had been rather a pleasant occupation. There was the feeling of mastery of the ability to do it satisfactorily.

It was found that the task was usually done faithfully. As evidence there was great similarity in the answer to questions which must, from psychological and logical considerations, be kindred items. The correlation of half the items against half among those which were supposed to show the same attitude or tendency in some instances ran as high as .90. The internal evidence of consistency was fortified by the results of an old-fashioned questionnaire.

The items used for the differentiation of the so-called mystic as against the opposite type of person were the following: Feel in harmony with divine purpose — Feel out of harmony with divine purpose; God seems remote — God seems near; Have had moments of satisfaction of immediate communion with a divine presence — No such experience; Have intimate feeling of God's love — Do not have such feeling; Sometimes have moments of great inspiration — Never had such experience; Seem to have divine leadings and promptings — No such experience; Have a satisfying inner experience in religion — No such experience. It should be noted that none of these questions use the term "mysticism." There is something akin in all of them and perhaps they are striking centrally within that kind of experience that has been historically and habitually designated as that of the mystic.

The persons from whom the data were derived were 600 students in the elementary psychology class of the University of Iowa during the college year 1924–25 and the 550 members of the corresponding class 1925–26. The elementary psychology is a required course in certain departments of the University. It is elected freely by other students. It appears to contain a fairly representative assemblage of students. They are, on the whole, of sophomore-junior standing. The distribution as to religious affiliation was as one would wish.

The data from the students of the 1924–25 vintage consisted of the self-rating items; some supplementary paper-pencil tests including one on moral judgments, one on abstract notions, two on reproductive imagination, and two on cheating; achievement as indicated by university grade-points; and three intelligence tests. After differentiation of the mystic and non-mystic groups, the technique was to draw and compare the cross-section pictures of the opposite types by the use chiefly of correlations, — including partial and multiple correlations, — among the several items. No report is given herein of that study.

In studying the succeeding class during the year 1925–26 additional data were secured and a supplementary bit of technique was devised. It was that of selecting from the entire number of 550 students the fifty extremes of both types, the two groups to be compared chiefly by the use of averages rather than of correlations. Each of the hundred persons was run through a battery of about a score of laboratory experiments each one of which was selected or devised to answer some hypothesis as to the causes of or the conditioning factors in the religious attitudes and experiences of the contrasted groups. It will occupy the space in this report to record some of the characteristic items in the comparison of fifty extreme "mystics" with the fifty persons of diametrically opposite type.

Studies made on certain outstanding mystics, notably Fox, Augustine, and Swedenborg, had seemed to furnish some basis for the theory that these persons respond more delicately than do other persons to outside influences. If so, the students who profess the experience of religious immediacy ought to have a lower threshold of perception than have the opposite type. Seven different laboratory tests of sensory discrimination, including visual, kinaesthetic, pressure, and pain, show no significant difference. Likewise there is no difference in motor-sensory responses, in simple reaction time, and in rate of tapping. In steadiness of motor control, using the metallic stylus to be inserted in a series of holes and the same stylus to be pulled along a progressively narrowing V-shaped graduated trough, there is little difference. The opposite groups are essentially alike also in mere perceptual ability as shown with the usual *aussage* test and with a series of true-false questions concerning items contained in a picture after it has been exposed to view for a half minute.

If the suspicion should arise that the two groups do not represent types at all, since so many of these basal reactions, or elementary sorts of behavior, do not differentiate them, there is some evidence pointing in that direction. It might turn out that professed differences in religious attitude are merely reflections of social attitudes. Supporting this notion is the fact, for example, that, taking into consideration all the cases of 550 students, there is a positive correlation of .40 between the degree of mysticism and the amount of religiosity in home training. There is also the positive correlation of .68 between the profession of this religious immediacy experience and the degree of participation in religious activities, such as attendance on church, taking part in young people's societies, and the like. Then, again, the mystics tend towards the conventional religious notions. There is a correlation, for instance, of .67 between the mystical experience and belief in a personal God.

There are, however, a goodly number of quite marked differences between the two groups. Those who profess religious immediacy are decidedly more suggestible. Three different tests were carried out. Two of them were in connection with experiments on the threshold of the perception of an electrical stimulus and on the number of units of stimulation the person could endure. After determining the threshold the experimenter professed to go over it again trying to fortify the original results; in a given number of instances there was the appearance of having the stimulus present while in reality the current was turned off. The mystics were fooled more than three times as often with the false suggestion of stimulation. The ratio of the observed difference to the probable error of the difference is 9.05, which means that the chances are a hundred million to one that the difference is not accidental. The higher degree of suggestibility may be an important factor in accounting for the professed religious experience of the two groups.

Some of the hypotheses concerning the cause of the difference between the two groups were entirely reversed. In studying religious geniuses it has appeared that there is a higher inner integration of the personality, a sort of luminous radiating center of being, as compared with that of the ordinary person. For the persons, however, of the particular age and training of the individuals studied, the reverse seems to be true. Several experiments were carried out testing in one way or another the central coördination of responses. Among these was one in mere motor coördination, — the holding of a metallic pointer containing a swivel upon a floating copper disk set into a phonograph plate which gyrated at the rate of one revolution a second. When the pointer was in contact with the disk the registration of success was indicated in taps per second by an automatic recording device. The non-mystics had almost double the skill in this type of coördination. The observed difference is about four times as large as its probable error, which means a chance of about one hundred and forty to one that the difference is not accidental.

Another test was a serial reaction experiment in which the four fingers of one hand were placed simultaneously on four keys each of which would release only its own special color. The object was to determine how speedily one could master the provoking combination and perform a specific number of right strokes. The non-mystics had the advantage by a difference 3.6 times as large as the probable error.

In most tests involving sustained mental effort and ingenuity the mystic group is at a disadvantage. In running five different mazes of progressive difficulty in the shortest possible time the non-mystics had the advantage with the ratio of about three to two and with a probable error indicating that the difference would occur by chance about once in a hundred times. In the Thorndike Intelligence Test, the Iowa High School Content Examination, and the Iowa Comprehension Test the non-mystics surpass the mystics by differences ranging from three to six times as large as the probable errors.

Another experiment devised, because it seemed to be a possible index of a central integration of personality, is that of response to pain and the threat of pain. The mystics proved inferior in ability to endure maximum units of electrical shock by a difference 5.6 times the probable error. On muscle steadiness, using the stylus in holes and in a V-shaped trough, there was no difference but when steadiness was motivated by threat of an electric shock the mystics proved more steady by a difference four times as large as the probable error.

A word of caution may be pardonable, against hasty inferences from this incomplete report of a study that is only in progress. The facts presented apply just to a state of mind of college students in mid-America at the end of the first quarter of the twentieth century. A study of these same persons caught at an earlier stage of their development or at a maturer epoch in their growth might conceivably present quite a different picture. The facts should be viewed in the light of any prevailing skill at the present time on the part of parents, churches, and educators, in meeting the problems of religious reconstruction of young people. The face value of our findings may be a function, again, of the particular sorts of religious controversy or of spiritual anemia that characterize the present period. Fuller interpretations must await other studies made on varying groups and types, done under different circumstances and by other methods of attack. A good many questions will be clarified by the skillful handling of the data now on hand. For example, the inferiority in intellectual ability and skill of the immediacy group may be influenced by the sort of college student, just at this stage of our culture, who insists on clearing his mind on problems of religious belief. That question is being handled by Mr. T. H. Howells in a study of the religious conservatives as against the radicals.

Any bit of satisfaction that attends the presentation of this report arises from the conviction that it may suggest one of the many ways out from our too chronic subjectivity in dealing with problems of religion. In summary these points seem worth recording:

1. This study presents a method of differentiating, from the mass of human beings, certain contrasted or special groups or types.

2. It exemplifies some methods of "explaining" these types in terms of definable aspects of experience that condition them.

3. By using a point-scale, self-rating device, it is possible to treat certain human attitudes quantitatively with demonstrated reliability, that would otherwise have to be handled only with the usual tools of rhetoric and of logical and psychological analysis.

4. The point-scale device, by holding the mind taut between the extremes of a dichotomous scale, makes it possible to perceive differences and judge them with reasonable trustworthiness.

5. By the use of averages and correlations, including multiple and partial correlations, it is possible to analyze out relationships in a compound that would otherwise remain confused and indefinite.

This is a victory not unlike that in the biological sciences in which staining solutions, microtomes, and other appliances render it possible to discover relationships that otherwise would be hopelessly entangled.

6. By the use of achievement tests and of laboratory experiments it is possible to validate the interpretation of data. In so far as any research can establish objective proofs of its findings and discover certain measuring sticks for the handling of its materials it has taken a step in the direction of becoming a science.

7. In establishing, through inner consistency and by objective proof, bodies of undeniable fact concerning a certain sort of religious experience, further problems are raised and inquiries provoked. With tools for research and the impulse to use them the study of religion may become a growing department of knowledge.

EASTERN AND WESTERN MYSTICISM

S. M. Dasgupta
(*Calcutta*)

IT is indeed difficult to enunciate a definition of mysticism that would apply equally well to its diverse types in the West and in the East. It would be as difficult to do it as it would be were I to attempt a definition of idealism. The terms Eastern mysticism and Western mysticism are also vague in themselves for they do not always signify merely two different types of mystical experience. The term Indian mysticism again does not mean any particular type of mysticism, for in India itself, where religious culture has been evolving for at least the last three thousand years, one is sure to find quite divergent types of mystical experience. "Mysticism" is not, however, an Indian term and it is even difficult to find a word with which one could translate the term into Sanskrit or into any Indian vernacular properly. The reason may be that the spirit of mysticism seems to have been so much ingrained in the conception of spiritual life in India and the distinction between a mystical and a non-mystical way of thinking seems to have been so little thought of that the type of thought and experience which has been characterized in the West as "mystical" was never thought of as any special mode of religious experience deserving of any special name.

When I, therefore, speak of Indian mysticism I do not have in my mind any corresponding Indian term with a specific connotation denoting any particular system of thought having a definite history, but I take the word "mysticism" in its application in the Western world and, keeping in view the essential or fundamental ideas implied by it, apply it to the systems of thought implying similar types of experience. But though some of these Indian types of experience are very much the same as types of experience which are regarded as mystical in the West, yet there are certain other types of Indian thought which though they agree in most of the essential features of Western mysticism are yet not wholly of the same cast.

I, therefore, venture to give here a definition which is wider than that required by Western mysticism but has the advantage of making an application of the term to non-Western varieties of mysticism. I shall define mysticism as a theory, a doctrine, or view that considers reason, or rather logical reasoning, to be incapable of discovering or of realizing the nature of ultimate truth, whatever may be the nature of this ultimate truth, but at the same time believes in the certitude of some other means of arriving at it. Harnack says that mysticism is nothing else than rationalism applied to a sphere above reason, which Dean Inge wants to correct as "reason applied to a sphere above rationalism." By rationalism Dean Inge understands mere logical thought — that shallow rationalism which regards the data on which we can reason as a fixed quantity known to all and which bases itself on a formal logic, utterly unsuited to a spiritual view of things. But he does not define what he means by "reason" nor does he seem to give us a sufficient description of it so that one could understand what is exactly connotated by it. It appears to me, however, that one of the most fundamental criteria of mystical thought and experience is grounded in the belief that, if the higher truth is to be attained, rationalism must be transcended, i.e., the higher truth cannot be realized by purely logical thought which only goes round and round an object and cannot lead us to the heart of reality. On this I believe most forms of mysticism, Eastern and Western, are agreed.

But the question is, If logical thought is unable to take us to the heart of reality what else can do it? On this point we have different alternatives proposed by different schools of Indian mysticism; some say it is asceticism, some say it is a kind of reason superior to all ordinary forms of knowledge, some say it is concentration or contemplation or self-surrender in God, or a special kind of intuitive grasp or an emotional fervor or intense love, and so forth. There is some divergence among the different schools of Indian mysticism regarding the nature of the ultimate reality; for while some say that it is the immortal or the spiritual self of man or such an absolute as the unity of reason, blessedness, and reality, others consider it as an indescribable vacuity which is too deep for thought and speech. Yet others think that this reality is none else but God in whom we live and who lives in us and whom we can realize in our lives by intense love and self-surrender.

Harnack points out that widely-extended investigations have been instituted with the view of classifying the mystics and it has been thought possible to distinguish between a scholastic, a Romanic, and a German, a Catholic, an Evangelical, and a Pantheistic mysticism. But at bottom the distinctions are not important. "Mysticism is always the same; above all there are no national or confessional distinctions in it. The differences never have to do with its essence, but only either with the degree, the way, and the energy with which it is applied or with its being predominantly directed upon the intellect or upon the will." This is true not only with regard to Christian mysticism but also with regard to most forms of Islamic mysticism or Sufism.

Islamic mysticism arose in the seventh century A.D. chiefly under Christian, Hindu, and Buddhistic influences, which have all left their mark on its doctrines. At the first stage it was mixed up with a tinge of asceticism but its chief features were religious fervor and gladness with a sense of the frailty of man and a fear of God and absolute submission to Him. These mystics did not believe in the ritualistic dogmas of the Islamic faith and thought that what was important was an unselfish love for God and that all asceticism practised for the sake of attainment of earthly pleasures or of Heaven was futile. But the extreme effects of this tendency to the abolition of rituals and religious observances did not appear immediately and these early mystics, though they cultivated poverty, resignation, and self-abasement, were on the whole orthodox. But gradually the pantheistic and philosophical tendencies began to show themselves in a prominent manner. Though in the Qurân itself there are phrases, e.g., "Everyone on the earth is passing away, but the glorious and honored face of thy Lord abideth for ever," which may be given a pantheistic interpretation, yet the pantheistic idea is so much removed from the usual Islamic faith and doctrine that it may well be suspected to be due to the influence of Buddhism or of the Vedanta thought from India. Probably the Alexandrian thought of Neoplatonism might also be responsible for the introduction of this line of thought which later on became so vitally important for the development of Islamic mysticism. Mr. Nicholson considers that the influence of Christianity, Neoplatonism, and Buddhism is an undeniable fact, but he does not refer to any one definite source such as the Vedanta or Neoplatonism. The main characteristics of Islamic mysticism consist thus of the doctrine of divine love and ecstasy. The Islamic mystic is possessed with an intense love for God which so completely fills him that there is no room in his heart for love or hate of any other kind. God alone is the truth and reality and both the world and the mystic's self are but a revelation of God. The ultimate realization can thus be attained by merging into this reality, by losing one's individual being and consciousness in ecstatic self-abandonment. Though there have been divergent forms of Islamic mysticism under divergent influences, it was only in the difference of degrees of the intensity of religious fervor or emotion or in the more or less intellectual character of their contemplative absorption that the different Sufis differed; but the main characteristics of divine love and union, absorption or communion with God were shared by them all. Thus Dhul Nun of Egypt (859 A.D.), who was under the influence of the doctrine of higher knowledge (marifat) or gnosis of the Gnostics, spoke of the higher intuitive and immediate knowledge by which God was known and by which, according to the degree or extent to which God was known, a man became lost in God until a state of complete unconsciousness was produced. He considered this higher knowledge as being peculiar only to those who see God with their hearts but did not speak of Fana or passing away in God which is a means by which the extinction of all passions, desires, etc., is brought about, though this Fana plays a great part in the teachings of Abu Yazid of Bistam of Eastern Persia where Buddhistic and Vedantic influences must have been strong, and particularly so because Abu Yazid learnt his Sufism from Abu Ali of Sind who knew of the Hindu science of breath-control (pas-i-anfas) which he describes as the Gnostic's worship of God. Abu Yazid used to say "I went from God to God, until they cried from me to me, 'O Thou I,' verily I am God, there is no God except me," so Al Hallaj also said "I am God" (an al HuQ), for which he was executed.

These, however, represent the extreme forms of Sufi pantheism. Renouncement of all worldly passions and desires, sincerity in speech and action, humility, charity, and the single-hearted self-surrender and devotion to God seem to have been the dominant moral creed of the Islamic mystics. When the mind is made pure by this elevation of morality the mystic has to indulge in "spiritual meditation and recollection which predispose and prepare the disciple for ecstatic experiences." The ecstasy, however, was a superior experience which could only be had through divine grace. But yet one could attain it by a continual repetition of the name of Alla or God and a deep concentration on the thought of God accompanied by breath-control "until the sense of personality gradually disappeared in a trance." But God may by His divine grace bring in Hal or a state of overwhelming emotion of divine experience which is generally transient but which may also become permanent. In the Sufi theory of ecstasy there is the negative aspect of the passing away of the individuality (Fana) and the positive aspect of abiding in God (Baqa). The true mystic not only loses his individuality but merges in God and stays in Him and again reveals Him as identified in God in the plurality of the world. But not all Islamic mystics hold this unitive or pantheistic view, for such a great Sufi as Ghazzali thought that man could not be identified with God, but God could by His grace enable men to know His nature. But without going into any further details, which our limited time would not permit us to take up, I may say that love of God is the watchword of all forms of Islamic mysticism otherwise called Sufism.

All these different elements of Sufism can be traced to the different schools of Indian mysticism. Thus the single-hearted love of God and self-surrender to Him form the cardinal doctrines of the Gita, the songs of Alwars, the Bhagavata Purana, and the like; the Fana or the extinction of desires is not only the creed of Buddhism, but also of Yoga and of Vedanta. The discipline of continual meditation, recollection, and concentration on God until his egohood vanishes away form the chief creed of the Yoga of Patanjali, and the recollection and meditation of God have formed the creed of most forms of Bhakti mysticism as found in the Gita or in Ramanuja. The state of Hal, or a state of spiritual intoxication of emotions, is a familiar phenomenon among the Alwar Vaishnavas and the Vaishnavas of Bengal. Judging from all these I presume that the influence of Yoga, Vaishnavism, Buddhism, and Vedanta on at least some or most forms of Sufism is more intimate than that of Neoplatonism.

It is, however, impossible to give even a brief intelligible account of the principal forms of Indian mysticism within the short time allowed for this lecture. I shall try to give a better account of it in my Harris Lectures on "The Development of Indian Mysticism." Both the Christian and the Islamic forms of mysticism represent the recorded forms of experiences of stray mystics who perceived God and were intoxicated by an intense love for Him, but the schools of Indian mysticism do not represent the record of the experiences of stray sages or seers or mystics; they are the systematic expressions of schools of philosophy having a definite philosophical basis. They, therefore, do not stand apart from the general current of religious thought and life but are themselves the different ways in which the religious and the philosophical life and thought of India found their distinctive expression.

The earliest phase of mysticism in India is that of the Vedic sacrifices which was founded on a belief that the sacred revealed literature of the Vedas was the source of such superior knowledge as could not be got by sense-experience or by logical thought of any kind and that all our best and highest desires could be attained not by logical courses of action but by action in accordance with the commands of the Vedas in the form of sacrifices, which had a magical power of producing almost whatever we might want for ourselves. This crude form of mysticism was succeeded by the higher mysticism of the Upanishads (about 700 B.C.) which is full of the throbbings of a rapturous experience which melt at the touch of the great reality of the self. This is an intuitive grasp which is by nature superior to all ordinary kinds of knowledge and which one could have only as the outcome of superior moral elevation, consisting of an extreme control of the senses, self-denial, desirelessness, and other moral virtues of purity, contentment, etc. This intuitive experience is said to be of Brahman which was the same as the immortal essence of our own selves and should on no account be confused with "ego" or the ordinary phenomenal self of worldly life. This experience is such that all distinctions vanish here and it is, therefore, indefinable and undescribable and can only be pointed out negatively as not being anything else that we know or can know. All distinctions of sense-experience or of logical thought melt here into one whole of experience of supreme blessedness which is the one reality and truth.

Another form of mysticism is that of Yoga, with a preparatory practice of supreme self-control and the practice of the great moral virtues of universal compassion, universal friendship, purity, contentment, desirelessness, truthfulness, non-injury to all beings, sex-control, etc. A preliminary course of breath-control is considered indispensable. The yogi mystic acquires the power of calmly concentrating on any particular object but preferably on God, and as the power of such concentration increases the mind of the yogin becomes one with the object of his meditation and as a result of that there dawns a direct, immediate, intuitive wisdom or vision of a supra-intellectual order by which he can have a direct perception of truth and reality. As this intuitive vision becomes more and more habitual with the yogin and he becomes more and more established in his concentrative meditation, he gradually loses the instinctive habits of the mind of ordinary consciousness, will, etc., and gradually the mind itself becomes disintegrated and destroyed and the self of pure intelligence shines in its own loneliness and purity. Though as the culmination of Yoga concentration our ordinary psychosis and intellectuality are absolutely destroyed or suspended in the early stages, yet there is nothing of ecstasy here. It is a case of psychological disruption of mind.

As an example of another type of mysticism I can refer to the Bhakti school which started as early as the third or the fourth century B.C. Beginning with an absolute self-surrender it gradually evolved through the successive centuries a doctrine of intense love for God. Moral elevation of the highest type, the practice of universal compassion, or universal friendship, piety, purity, contentment, charity, etc., form here also the indispensable qualifications for a bhakta. But love of God is found here to be the all-engulfing passion of life which swallows up all other interests. This intensity of love in some of its types, as in the case of Chaitanya, the great religious teacher of Bengal, produced external lapses of consciousness as the devotee or the mystic became lost in his emotion of love for God.

It is only in this last type of mysticism that God was the supreme object of love and contemplation and the devotee had intuitive visions of God and had a direct and intimate relationship with God which was as real to him as any human relationship could be with father, friend, master, bridegroom, and the like. Whether there was an exchange of ideas between the Vaishnava mystics and Christian mystics cannot easily be determined. So far as my knowledge goes I have not found anything which would justify me in saying that such a theory is probable or necessary. But as the text of I John 3: 2b says, "We know that if He shall be manifested, we shall be like Him; for we shall see Him even as He is," so in some of the leading types of Vaishnavism we find the belief that the soul has direct powers of immediate vision and intuition of God and that we all participate in the nature of God but that unless our minds were absolutely pure by His grace and by love of Him and by moral endeavors there was no chance of our being near to God or of perceiving Him. But it is more in St. Paul than in St. John that the testimony of the inner experience of an inflooding of divine spirit, call it God, Christ, or the Spirit, becomes manifest. The basis of all this is the personal experience of Christ himself, all whose speech and deeds are permeated by a deep personal contact with God and His fellowship, which gives him the strength of looking beyond the mundane world and at the same time of bringing that world always into intimate touch with our ordinary world. In him we find a complete living in God and an inflooding of intimate intercourse with God as a matter of direct experience of the soul.

Whatever may be the differences in the views of the different Christian mystics regarding the emphasis they put either on poverty, or on renouncement, or on the contemplative life of communion with God, or on the intense love of God, or on the pantheistic conception of our identity with God, the spirit of Christ, consisting of the necessity of acquiring holiness in our persons by a renouncement of the baser desires of life, the desirability of a close and keen fellowship with God and a belief in our power to come into direct fellowship and intimacy with God seems never to have been wanting in the different types of Christian mysticism. The renouncement of worldly desires and the adoption of poverty, together with an intensity of a feeling of God's love and love for God, seems to be almost unique in St. Francis of Assisi. Yet even Clement of Alexandria, one of the earliest of Christian mystics, speaks of the necessity of mortification and contempt of the world, implying a life of self-conquest and contemplation of God. The conception of the intense love of God often takes the shape not only of the love of father and son, of master and servant, but also of bridegroom and bride. It is difficult to find any elements of real mysticism among the Christian mystics, excepting the Eucharistic doctrines, which are not found almost identically among the Vaishnava mystics of India. The same self-surrender, the same emphasis on the necessity of the elevation of moral character and renouncement of worldly desires produced by an excess of divine love, the same face-to-face vision of God as father, master, friend, and bridegroom, and the same contemplative participation in God and His works through love, and the same emphasis on the necessity of extending one's love to all his fellow-beings are to be found among both. The only difference that one might find in the Indian type is its characteristic assimilation of Indian myths as integral parts of the Indian mystical experience, just as the stories of angels and other episodes become inextricably mixed up in the mystical experiences of the Christian mystics. The Vaishnava mysticism has not always any decidedly pantheistic predilection, nor does the Christian mysticism either always show it, but here also as in Christian mysticism we have sometimes a deep absorption in God through

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intense love of God. I do not bring in the other forms of Indian mysticism as their similarity with Christian mysticism is more remote.

The fact that the Christians, Mohammedans, and Hindus agree so remarkably in the experience of the mystics who are so intensively religious shows that in mysticism we have the universal and fundamental elements of religious experience in its true depth and intensity. If this craving for the transcendent or the divine, this otherworldliness, was not a reality of the human heart, religion itself would have been wholly unreal and no prophet could have been able to convince us of its truth.

PRAGMATISCHE TENDENZEN IN DER RELIGION UND PHILOSOPHIE DER INDER

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DIE Inder gelten mit Recht als eines der religiösesten Völker der Welt. Schon ein Blick auf ihre Literatur zeigt sofort die ungeheure Bedeutung des religiösen Moments, das alle anderen Regungen übertrifft; findet der absolute Primat des Religiösen im Geistesleben Indiens doch in Europa nur ein Gegenstück in der Blütezeit der mittelalterlichen Weltanschauung. Von der Religiosität der Völker des Westens unterscheidet sich die der Inder aber sehr wesentlich darin, dass sie seit jeher nicht bestrebt war, ihre Inhalte zu einer mehr oder weniger für alle Inder bindenden Dogmatik zusammenzufassen, sondern dass sie stets eine grosse Vielheit von verschiedenen Anschauungen über Kernfragen des religiösen Denkens zuliess. So stark die Bindung ist, die soziale Vorschriften und Ordnungen auf das Tun und Denken des Einzelnen ausüben, so gross ist im Gegensatz dazu die Freiheit, die dem Einzelnen in der Wahl seines Glaubens gelassen wird. Während die Sitte und die Institution der Kasten jedem Individuum mit Strenge vorschreiben, was es essen darf, wen es heiraten darf, wie es sich in den verschiedensten Lebenslagen zu verhalten hat, gibt es über die grossen religiösen Fragen des Lebens keine allgemein-gültigen Lösungen, es gibt keine Instanz, die dem Einzelnen vorschreibt, zu glauben, dass es viele Götter oder einen Gott gäbe, die ihn dazu nötigt, ein Polytheist, Monotheist, Pantheist oder Atheist zu sein. Die Idee der Toleranz ist bei den Hindus zu allen Zeiten so stark entwickelt gewesen, dass wir bei ihnen nur vereinzelt Glaubenskriege und Ketzerverfolgungen finden, und dies, obwohl das religiöse Bewusstsein fast immer aufs Stärkste entwickelt war und die Indifferenz in Glaubensdingen, die in Europa meist die Voraussetzung weitgehender Duldsamkeit gewesen ist, nie, wie etwa in der Aufklärungszeit, das ganze Leben des Volkes überschattete. Erst das Eindringen dogmatischer Religionen, wie des Islâm und der Glaubenslehren des Westens hat durch den Druck, den heilige Kriege und Inquisitionsgerichte mit sich brachten, bei den Hindus einen Gegendruck erzeugt, der ihre Mentalität soweit wandelte, dass sie auch mit weltlichen Waffen gegen Religionen stritten, die sie sonst nur mit geistigen bekämpft hatten. Das eigenartige Verhalten der Hindus anderen religiösen Ueberzeugungen gegenüber, ihr Geltenlassen derselben bei völliger Wahrung des eigenen Standpunktes, ist ein Ausdruck der merkwürdigen Einstellung, die der Inder dem Wahrheitsbegriff gegenüber einnimmt. Diese Einstellung wird uns deutlich werden, wenn wir zunächst einmal in Betracht ziehen, wie sich der Hindu seiner heiligen Schrift gegenüber verhält.

Der Hinduismus hat eine sehr grosse Zahl von Werken hervorgebracht, die ihm als autoritative Lehrbücher der Religion und Moral gelten. Diese Werke zerfallen in zwei Gruppen: in solche, die auf der Ueberlieferung von heiligen Männern beruhen und solche, die auf göttliche Offenbarung zurückgehen. Die ersteren, die Werke der Tradition, der Smriti, wie die Epen, die Purânas, die Âgamas, die Dharma-shâstras usw. sind die Grundlage des tatsächlichen Glaubens fast aller Hindus. Dieses Schrifttum ist ausserordentlich umfangreich und in seinem Inhalt sehr mannigfaltig, so mannigfaltig, dass in dem einen Werk mitunter geradezu das Gegenteil von dem auseinandergesetzt wird, welches ein anderes verkündet. Trotz dieser gewaltigen Differenzen gelten diese Werke — es handelt sich in erster Linie um die sog. Purânas — als gleicherweise heilig und sogar als auf denselben Urheber, den heiligen Vyâsa, zurückgehend. Die unbestreitbaren und nie bestrittenen Unterschiede, die zwischen ihren Lehren bestehen, werden dahin erklärt, dass Vyâsa absichtlich für verschiedengeartete Menschen verschiedengeartete Heilswege dargelegt habe, weil sich eines nicht für alle schickt.

Tragen diese Werke der heiligen Ueberlieferung zum Teil einen stark sektarischen Charakter und erfreuen sich manche von ihnen, unbeschadet des Ansehens, in dem sie stehen, nicht bei allen Hindus einer gleichen Hochschätzung, so gelten die Werke der Offenbarung, der Shruti, d.h. also der Veda mit seinen Anhängen, bei allen Hindus als Richtschnur für alles Denken und Tun. Der Veda wird für so heilig gehalten, dass man ihm überirdischen Ursprung zuschreibt. Er ist so ewig und unvergänglich, so durch und durch autoritativ, dass von ihm gesagt wird, er besässe gleich der Sonne die Kraft durch sein eigenes Licht sich selbst und alles andere zu erleuchten, während Menschenwerk nur dann zu Recht bestehe, wenn es sich auf ihm gründe. Trotzdem somit vom Veda das Maximum dessen ausgesagt wird, was von einer heiligen Schrift ausgesagt werden kann, gelten seine Lehren und Vorschriften doch nur als in gewisser Sphäre gültig. Der Veda ist gleichsam nur der Wegweiser, der den verschiedenen Menschen den ihrer Individualität entsprechenden besten Weg zum Ziele weist; er hat keinerlei Wert an sich. Deshalb wird von dem Heiligen, der die volle Erkenntnis gewann, gesagt, er sei an den Veda nicht mehr gebunden; der Veda sei für ihn einer Fackel gleich zu werten, die nur solange ihrer Bestimmung diene, bis man durch die Dunkelheit am Bestimmungsort angelangt sei, die man dann aber als nunmehr unnötig beiseite legen könne. Ebenso wie ein kleiner Teich voll Wasser wertlos ist an einem Orte, der ganz und gar von Wasser bedeckt ist, während er unendlichen Wert besitzt an einem Platze, an dem sonst kein Wasser vorhanden, so ist der Veda wertvoll solange der Mensch um die Erkenntnis ringt, ohne Bedeutung für den, der sie besitze.

Eine ähnliche Anschauung begegnet uns auch in Buddhismus. Für so heilig er die im Tripitaka verkündete Lehre hält: auch sie sind nur von bedingtem, vorbereitendem Wert: der Erkennende bedarf ihrer ebensowenig, wie derjenige, der mit Hilfe eines Flosses einen Strom überschritt, dieses Flosses noch bedarf, wenn er am anderen Ufer angelangt ist.

Ebenso wie in der heiligen Schrift sind auch die Riten nur Mittel zur Erreichung des Göttlichen, nicht Selbstzweck. Natürlich sind die Anschauungen über Wert and Bedeutung des Rituals zu den verschiedenen Zeiten und bei den verschiedenen Indern, ihrer Geisteshaltung und Bildungsstufe entsprechend, sehr verschieden. Aber die allgemeine Tendenz geht in dieser Richtung. Dem philosophisch gebildeten Inder ist die Verehrung eines Götterbildes kein Götzendienst, sondern ein Hilfsmittel, um den religiösen Akt des sich Nahens an das Göttliche leichter vollziehen zu können. Indische Denker verteidigen die Bilderverehrung damit, dass sie sagen, ebenso wie die Betrachtung des Bildes einer Geliebten, das Erblicken der Landesflagge und dergleichen bestimmte Gefühle der Liebe, des Patriotismus usw. zu erzeugen vermag, ebenso vermöge auch die andächtige Verehrung eines Idols Gefühle der Heiligkeit, der Gottesergebenheit usw. hervorzurufen, obwohl der Gläubige sich durchaus der Tatsache bewusst ist, dass das Idol als solches nur ein lebloser Stein ist. Besonders ausgeprägt finden wir die

Theorie, dass der Idolkultus nur ein Mittel zur allmählichen Erlangung einer höheren geistigen Vollkommenheit sei, dass ihm aber an sich kein unmittelbarer Wert zukomme, bei Buddhisten und Jainas. Die Jainas z.B. verehren 24 Tîrthankaras, d.h. Propheten ihrer Lehre in prächtigen Tempeln mit Hilfe eines prunkvoll ausgestatteten Rituals. Die Verehrung dieser Tîrthankaras kann streng genommen dem Frommen keinerlei Nutzen bringen, weil diese Tîrthankaras, im Gegensatz zu den Göttern der Hindus, garnicht in den Weltprozess eingreifen, den Verehrer für seine Frömmigkeit also garnicht belohnen können. Die Tîrthankaras befinden sich alle in dem weltüberlegenen Zustand des Nirvâna, sie handeln nicht mehr und kümmern sich nicht mehr um die Dinge hier auf Erden. Trotzdem trägt ihre Verehrung für den Frommen unendlichen Lohn in sich. Denn dadurch, dass sich der Gläubige dem Propheten naht, als ob dieser ihn aus der Ferne des auf dem Gipfel der Welt liegenden Wohnsitzes der Seligen begnaden könnte, wird sein Denken auf das Heilige, Ueberirdische gerichtet, er wird, solange der Akt währt, darüber hinaus sittlich geläutert und geistig erhoben. So ist der Kultus denn letzten Endes eine bei vollem Bewusstsein vollzogene inzitive Fiktion, dazu dienend, dem Frommen das Fortschreiten auf dem Weg zur Erlösung zu erleichtern.

Bereits diese Betrachtung der indischen Anschauungen vom Wesen der heiligen Schriften und vom Wesen der Verehrung zeigen uns die Einstellung, die der indische Geist religiösen Dingen gegenüber einnimmt, denen der Abendländer — zumal in der Blütezeit rein religiös-orientierter Weltanschauung, im Mittelalter — absoluten Wert beimisst. Dies tritt noch klarer ins Licht, wenn wir uns vergegenwärtigen, wie der philosophische Inder über die Lehre als solche denkt. Für ihn gibt es keine alleinseligmachende Heilslehre, sondern eine grosse Zahl von Anschauungen, die obwohl sie von einander aufs stärkste abweichen, doch alle einander koordiniert sind. Für den Hindu sind sechs Systeme — oder richtiger Gruppen von Systemen — gleicherweise orthodox, obwohl die einen eine Atomistik, andere eine Evolution der Welt aus einer Urmaterie lehren, obwohl die einen die Realität der Welt behaupten, die anderen sie als eine Illusion betrachten, obwohl die einen einen klaren Theismus, andere einen ausgesprochen Pantheismus verkünde und andere wieder einen entschiedenen Atheismus zu begründen suchen. Trotz dieser sinnfälligen Differenzen gelten alle diese sechs Systemgruppen dem Orthodoxen als gleich richtig, sie sind „Darshanas,“ d.h. Anschauungsweisen, die Welt zu betrachten, nicht letzte, endgültige, unumstössliche Welterklärungen. Die Einsicht in die relative Berechtigung diametral entgegengesetzter Anschauungen führt die Anhänger einer bestimmten Lehre dahin, dass sie die von ihrem eigenen abweichenden Systeme als vorbereitende Stufen auf dem Wege zu der von ihnen selber verkündeten vollen Wahrheit ansehen.

Ausgesprochen pragmatistische Züge gewinnt diese Ansicht in den beiden Systemen, die als Höhepunkte innerhalb der Spekulation der Inder betrachtet werden müssen: in dem Kevalâdvaita-Vedânta des Shankara und in dem System des Mahâyâna-Buddhismus. Für den Vedânta ist die Welt nur Schein, nur Mâyâ, jedes Einzelne mit dem ewigen alleinen Absoluten, dem Brahma, identisch. Solange diese Erkenntnis aber nicht intuitiv erfasst und in der Erlösung praktisch verwirklicht wurde, solange haben alle Lehren und alle Kulte ihren bedingten Wert; deshalb verehrt der, der die Einheit von Gott und Seele noch nicht realisierte, einen persönlichen Gott als von ihm selbst verschieden, deshalb sinnt er nach über die Entstehung der Welt und andere Fragen, die vom Standpunkt der erreichten höchsten Erkenntnis als gegenstandslos bezeichnet werden müssen. Alle diese Formen des Denkens und Tuns werden auch von dem ausgeübt, der zwar theoretisch von der Alleinheitslehre überzeugt ist, der aber nur in den seltenen Momenten ekstatischer Vertiefung sie in ihrer vollen Wirklichkeit zu erfassen vermochte. Die verschiedenen Gestaltungen des Glaubens und Handelns sind für ihn vom Standpunkt der höheren Einsicht aus gesehen zwar Irrtümer, aber doch solche von förderlicher Art, die den Menschen weiter bringen sollen bei seinem Streben nach der Vollendung. Diese ,,förderlichen Irrtümer" sind sogar notwendig, da ohne sie ein Fortschreiten nicht möglich ist. Dies wird in dem Vedânta-Werke Pancadashî an einem schönen Gleichnis dargelegt: ,,Ein Mann, der einen glänzenden Edelstein zu erlangen sucht, und in dem Glauben, den Edelstein selbst zu sehen, auf ein in seiner Nähe von diesem reflektiertes Licht zugeht, kommt von dort aus, sobald er seinen Irrtum eingesehen, zu dem richtigen Edelstein selbst, den er schwerlich gefunden haben würde, wenn er nicht durch einen förderlichen Irrtum auf die richtige Spur gelenkt worden wäre."[1] Eine ähnliche Lehre von einer zwiefachen Wahrheit tritt uns auch in Mahâyâna-Buddhismus entgegen und wird dort in ähnlicher Weise begründet.

Bemerkenswert ist es nun, dass derartige Lehren keineswegs reine Theorie bleiben, sondern dass sie auch im Leben ihre Verwirklichung finden. Beweis hierfür ist einmal die Existenz von Schriftstellern

[1] v. Glasenapp, *Der Hinduismus* (München, 1921), S. 173.

wie Gaudapâda und Vâcaspatimishra, welche die verschiedensten philosophischen Systeme dargelegt haben und zwar nicht etwa nur rein objektiv-theoretisch, sondern so, dass durch ihre Auseinandersetzungen die Weiterentwicklung der Systeme und ihrer Probleme wesentlich gefördert wurde. Sodann aber auch die durch die Lebensgeschichte vieler grosser Männer (Shankara) sogar noch aus jüngster Zeit — ich erinnere an den bekannten bengalischen Heiligen Râmakrishna — belegte Tatsache, dass verschiedene Standpunkte von demselben Individuum gleichzeitig eingenommen werden. So wird denn bald Shiva, bald Vishnu, als der höchste Gott von demselben Individuum gläubig verehrt, dann aber wiederum die Einheit des eigenen Ich mit dem Absoluten zu realisieren versucht und alle persönlichen Götter werden als der niederen Sphäre der Scheinwelt angehörig und deshalb letzthin nicht real betrachtet.

Das Gesagte zeigt, wie in der Weltanschauung aller Inder Gedankengänge entwickelt sind, die sich mit der des Pragmatismus oder Vaihingers „Philosophie des Als-ob" berühren. Der Glaube an die Gleichberechtigung völlig verschiedener Ansichten über das Verhältnis von Gott und Welt entspringt aus der tief im irdischen Geiste verwurzelten Ueberzeugung, dass alle Weltanschauungen einen provisorischen Wert haben können, weil sie gleichsam nur Hilfskonstruktionen sind, die sich den Anlagen und Neigungen des Einzelnen anpassen. Sie sind insgesamt letzthin nur Wege, die zu einem Ziel führen sollen, das menschlicher Erkenntnis verborgen ist, dessen Dasein aber von jedem mit grösserer oder geringerer Gewissheit intuitiv gefühlt wird. Die Ausbildung dieser Anschauung in Indien ist durch zwei Momente wesentlich gefördert worden: erstens dadurch, dass alle Philosophie wie alle Religion in Indien einen durchaus praktischen Charakter trägt und sodann dadurch, dass die eigenartige Struktur des indischen Denkens im Gegensatz zu dem westlichen an die Stelle eines festen, Wahrheitsbegriffs einen wandelbaren, dynamischen setzt und deshalb dies Nebeneinander von Meinungen zulässt, die dem Verstand als unvereinbar miteinander erscheinen müssen.

THE PARADOX OF MYSTICISM

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MYSTICISM is a subject upon which temperate judgment is rare. It has for the most part provoked either emphatic condemnation or unmeasured approval, creating in those who have studied it the disposition either of the persecutor or the disciple. It is tempting to look for an explanation of this in the fallibility or the insincerity of human interpretation. But I check myself. Out of many scholarly works on mysticism I will recall two. The first is *Les Fondements de la Connaissance Mystique* by Récéjac. It opens with these words: "The question presents itself to us with this alternative: either mysticism contains a negation of thought worse than scepticism, or it is the most perfect activity of the mind." Evidently, then, there are grounds for both opinions. The other is Professor Leuba's recent book *The Psychology of Religious Mysticism*. The author's desire to report the facts with absolute impartiality is admirable. And what do we find? We find two totally different judgments of mysticism at war with one another: first, that mystics are spiritual drug takers; second, that mystics are creative artists in the spiritual life. Confronted by such reports from men of competence and integrity I prefer to believe that mysticism is a complex phenomenon and that each type of estimate is in its degree sound. What I call the paradox of mysticism is that it should be susceptible of such opposed interpretations, and my problem is: How is this possible?

Let us begin by calling to mind the unfriendly type of interpretation. Its general tendency and purport is familiar. Mysticism is represented as a form of psychasthenia. Various classifications are suggested: the simplification of consciousness, infantile regression, spiritual intoxication, "the return to the condition of protoplasm, to the blessed consciousness of the Unutterable." All point to the same conclusion: that the mystic retreats from reality, that his career is a progressive mental relaxation, a progressive diminution of psychic tension, the logical end of which is the supposedly complete unconsciousness of the ecstatic trance. More particularly, this nihilism, said to be characteristic of mysticism, is described as twofold. (1) A nihilism of the will. All finite ambition is renounced as worthless if not actually mischievous. The end is either complete inactivity or that condition of spiritual drifting which Delacroix has happily called "un somnambulisme divin." (2) A nihilism of the intellect. The rejection of the discursive reason and the assertion that God cannot be conceptually known but is to be apprehended, if at all, in some non-rational, intuitive way.

It is clear enough that there has been much in mystical teaching and practice to lend support to such a conclusion. There come to mind on the one hand the various consequences of that irresponsible attempt to transcend the limitations of finite willing. The aspiration that expresses itself in the cry, "Oh, to be nothing, nothing!" or that reaches after complete detachment and inner freedom has produced Quietism, Antinomianism, and, perhaps most sinister phenomenon of all, the magical exploitation of the divine for non-spiritual ends. One need not elaborate the record. These fruits of the working of mysticism in social and individual life are familiar to all students. On the other hand, we recall the part played by the doctrine of the ineffability of the Divine Unity, the many variations on the theme that "Gnosis is nearer to silence than to speech," and the recurrent attempts to mark off some special faculty of mystical knowledge.

The case for an unfavorable verdict thus merely hinted at could evidently be stated with weight and impressiveness. But the opposite party of opinion points out that it is persuasive only because it overlooks some important facts. I will mention three. (1) Relaxation and diminution of psychic tension do not tell the whole story. The mystic's preparation represents a prolonged and arduous effort that is to be described more justly as concentration than as letting-go. This preparation, of course, has its exclusions — hence the name *via negativa* — but behind the negations lies a positive, whether it be the positive of an immediate and highly charged intuition of God or the positive of an ethical universality and disinterestedness. "A naked intent of the will fastening itself upon God" are the words used by an old English mystic to describe his undertaking. What is there in common between that and the pathetic desire for simplification of consciousness on the part of those who have found the complexities of thought and conduct too much for them? (2) The persistent and vehement attempts of the mystic to communicate the meaning of what has befallen him. That the doctrine of ineffability is there I grant, but present also in paradoxical union with it is the painful struggle for self-expression. The significant thing about the mystic's rejection of all predicates for God is that it does not stand alone; it comes *after* the attempt at definition. The experience and the predicament are like those of the creative artist. The artist must express himself; necessity is laid upon him to write or to compose or to paint. Yet when he compares his actual achievement with his original intuition the sense of disappointment and limitation is poignant. How pale and inadequate seems his utterance by contrast with the vision that inspired him! "Ever not quite"; — in these words are contained at once the insatiable ambition and the despair of the creative life. The mystic's need to tell the burden of his revelation shows that we are not dealing with any private and incommunicable truth and that there is not complete discontinuity between mystical intuition and the business of conceptual definition.

(3) In singling out Quietism, Magic, or Antinomianism as characteristic fruits of mysticism we may be in error. Perhaps these are corruptions or aberrations of mystical ambition proper. For in history mysticism has conspicuously engendered a life of devotion. Its renunciation of practical aims has not been incompatible with a subsequent adoption of them. If it has heaped scorn on human reason, it has also made its contributions to rational theology. If it has glorified the contemplative life, it has also set its approval upon the life of action. If the ideal of Mary has been dear to it, so has the ideal of Martha. Here, as before, the truth about mysticism will be found, if it can be found, not in suppressing either side of the paradox but in trying to do justice to both.

The result of our attempt to elaborate the paradox is that mysticism stands out as the death of the will and its rebirth, as the death of reason and its rebirth.

In trying to understand this, let us make use of an analogy. In order to start the wheel of a vehicle moving, friction is necessary; the wheel must have something to push against. If now you regard that point where the wheel is in contact with the ground from the direction of a movement completed, it is a point of rest; but if you regard it from the direction of a possible future movement, it is a point of departure. It is precisely because it is a point of rest that it can serve as a point of departure.

With this in mind let us turn first to the problem of mystical detachment. Why should the saint feel obliged to renounce what he calls worldly ambitions — property, health, reputation, culture, and so forth? In calling these things "vain" he means that they no longer command his unreserved devotion. They are unreal, and he is unreal in pursuing them. He cannot believe in them; he cannot believe in himself. Beneath the desire for complete detachment from these objects of pursuit we may, therefore, discern a more profound ambition: the desire to discover one's real self by discovering the Being of supreme worth, God. I doubt if it is possible to define this desire to be real in any simpler terms, but one can try to evoke a recognition of what is meant by pointing to things that resemble it. To escape from the false security of a Fool's Paradise into the real world, even though the real world prove painful, brings with it a tonic sense of assurance and power. Again, contact with physical nature may provide a test whereby I am delivered from the thought of the artificiality of those standards by reference to which, in a sheltered civilized existence, I am enabled to preserve a precarious self-confidence and self-respect. If I can sail my boat through a storm or find my way out of the woods when lost, then I have been up against the real thing. I have measured myself by that and have not been found wanting. The mystic, let me suggest, is measuring himself against the Most Real, against God, and so discovers what he ultimately amounts to. It is natural that this experience should first be reported as a conviction of one's own worthlessness; by contrast with the Holy God, one's pretensions amount to nothing at all. But that negative judgment of worthlessness has been made possible by a prior recognition of Holiness in its positive form, or, to express it differently, the detachment from finite aims and natural goods is the symptom of a grasp upon a more real self. If, then, mystic nothingness conceals a positive achievement in the way of self-discovery, it might well engender that characteristic attitude of confidence-in-humility from which a life of devotion could emerge. The world, which was once well lost because one could bring to it no ultimate assurance, might now be recovered. The ground where the will came to rest would serve as the basis for a new thrust of the will.

I pass to the nihilism of the intellect. We may note at once that the mystic is not primarily concerned to recommend a way of knowing God. Knowledge is not his major interest. Assertions that the light of conceptual knowledge is really a darkness, that God is apprehended in a cloud of unknowing, and many others to the same effect, are not intended to prescribe a *via negativa* for the intellect. They are, on the contrary, in their first intention, a report of the difficulty the mystic has found in trying to express a revelation that has come to him. He does not say, "If you wish to know God you must give up the attempt to define Him," but "If you have known God you will find it difficult or impossible to define Him." Thus, whatever his difficulties in the way of self-expression, he may still have knowledge of a kind.

But what kind of knowledge can it be? We may be led to an answer if we ask why he finds such difficulty in expressing himself, so that he lands finally in denials. William James has put us in the way of a solution. "Their very denial of every adjective you may propose as applicable to the ultimate truth, . . . though it seems on the surface to be a no-function, is a denial made on behalf of a deeper yes. Whoso calls the Absolute anything in particular, or says that it is *this*, seems implicitly to shut it off from being *that* — it is as if he lessened it. So we deny the 'this,' negating the negation which it seems to us to imply, in the interests of the higher affirmative attitude by which we are possessed." (*Varieties*, p. 416.) This kind of experience is more appropriately described as a point in which knowledge is concentrated than as a point to which knowledge has been simplified. An illuminating analogy is provided by the work of art. We note two points. (1) In the intuition of the artist the significance, concealed or obscure for everyday vision, of some part of reality is summed up and expressed in symbolical form. The dramatist condenses his material in accordance with the strict conventions of dramatic structure and creates a whole of character or action that evokes from us the judgment: "This is what life means." The painter even of still-life subjects confers on us a new power of vision. To see a bowl of roses as Fantin Latour painted them is to see for the first time what a rose really is; to receive as it were a revelation of the Platonic idea of rose. The metaphysical intimations of poetry and music, while less definite, are not less real and potent. (2) This aesthetic intuitive knowledge is not destructive of scientific or philosophical knowledge. The two kinds of knowledge are complementary. A botanist will be a better botanist if he can cultivate the artist's feeling for the kind of thing a rose is, and the artist will be a better artist for accurate botanical knowledge of roses.

Now, if it is possible for art to have an intuition of the summed up meaning of part of reality, might it not be possible for religion to have an intuition of the summed up meaning of reality as a whole? Might not the moments of mystical insight be moments in which our knowledge of the world underwent a condensation?

Let me try to set out the formal characteristics of this kind of knowledge in the simplest schematic way. I assert about a subject, S, that S is A. As my knowledge increases I go on to assert that S is B, and C, and D, and so forth. But it is a truism that, as these predicates multiply, I may come to know so much *about* S that my understanding of it becomes obscured by an overgrowth of detail.

I then have to reverse the direction of my effort. I must try to recover an intuition of S in its wholeness. But when I come upon S I do not find a blank identity. For two reasons: (1) S is defined as the subject of these predicates. If after an interval I return upon S, it is upon S as modified by the new predicates, — the same yet different. (2) But S is also defined as the subject of all the predicates that later discoveries may cause me to attach to it. It is thus an inexhaustible reservoir of predicates. That is why instead of extinguishing thought it can serve as the starting point for new knowledge.

Mystical intuition of reality then seems to me in principle not impossible, and, as here regarded, it is not exposed to the criticism of being empty and sterile. As providing the intuition which it is the business of philosophy to unfold it would constitute a perpetual starting point for renewed philosophical inquiry.

Since my purpose in this paper is not to defend a thesis but with, I hope, more becoming modesty, to offer a clue, I will summarize and restate my suggestion.

"Do not talk to me of mysticism," remarked a colleague impatiently. "Mysticism is the end of everything." At first sight that seems true. For the supernatural good which the mystic prizes under the name of union with God or absorption in the Divine Life amounts, in terms of natural good, to nothing at all. Secondly, he would sever the nerve of ambition and responsible action and bring himself to a state of moral nihilism. Thirdly, he attenuates knowledge to an unutterable intuition. But this first impression is removed if we think of the life of the mind as a rhythm in which mysticism represents one pole. Mysticism then appears as a moment of suspension from which the mind emerges recuperated, as a point of arrest for the will that serves also as a point of departure, as a node of concentration, to borrow Hocking's term, through which conceptual knowledge has to pass. The substance of our suggestion is that we should take mysticism not in its isolation, but as an organic stage in a process of mental alternation. We are not then confronted with a choice between mysticism and morality or between mysticism and philosophy. We choose both because each lives in the death of the other.

THE MYSTICS: — THEIR EXPERIENCE AND THEIR DOCTRINE

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THERE has been a marked revival of mysticism in the West during the present century. This revival has produced many historical works giving accounts of the mystics, numerous apologetic volumes in its behalf, and a number of attempts to fathom and explain the psychology of mysticism. Several more or less explicitly mystical cults have arisen, and an enormous literature has appeared at the hands of their promoters. All of these claim to put the sympathetic reader in tune with the Infinite, to lift him above the plane of mortal mind, and to realize oneness with Divine Reality.

This is the ancient and characteristic objective of mysticism, — to overcome the discursive, fragmentary, and external types of thought and experience on behalf of a unified, vivid, and satisfying sense of ultimate reality. Mysticism has always claimed that this could not be achieved as an intellectual or rational experience, but must be sought by superrational or non-rational means. In this contention modern psychology has afforded some aid and comfort to the mystics, for psychology has shown the primacy of the non-cognitive aspects of experience. It has given first place to impulse, habit, desire, and feeling. Some of the foremost psychologists have clearly realized that mysticism presents phenomena of special importance in this newer trend of their science and have studied these phenomena with illuminating results. These results may be briefly formulated. First is the description of the mystical state in psychological terms. It is a state of great vividness and intensity of feeling, often attaining ecstasy and hypnosis. The subject may become insensitive to ordinary sense stimuli. He is carried out of himself, and his normal perception and discrimination are so far exceeded that he is unable to describe the experience afterwards. He reaches a state of active passivity in which he is not conscious of effort, yet is intensely alive and highly suggestible.

Secondly, the psychologists have identified the mystical experience in relation to kindred phenomena of non-religious types. Just as it was a great aid to the understanding of perception to put it in relation to illusion and hallucination, so it throws light upon the mystical experience to see it in relation to the effect of drugs and different forms of obsession. Various kinds of intoxication, suggestibility in the sexual life, and absorption in aesthetic experience, afford striking parallels to the mystic state.

Thirdly, it is found that the mystical experience, on the psychological side, is much the same in different religions, in Judaism, Mohammedanism, Buddhism, and Christianity. Only the names of the deity and the forms of the ceremonials are different. There is the same sense of alienation, conflict, uncertainty, and at length the consummation, relaxation, illumination, and peace. The mystic state in all religions reflects the patterns of the social environment and the accents of the native culture.

These results, now made familiar in many treatises, open the way for an observation of the greatest importance, which it is the main purpose of this paper to discuss, namely, that it is now possible to show that the mystical experience is quite distinguishable from the doctrine of mysticism. The *experience* falls within the province of psychology for its description and analysis. The *doctrine* is a speculative, metaphysical interpretation of the experience. It has been characteristic of the mystics from the days of Plotinus to speak of the experience and the doctrine as identical and it is only in recent years that a clear and well grounded distinction has been made. But in the light of present knowledge they fall apart into the realms of factual events and theoretical opinion. The mystical experience is a fact of the emotional life, an experience of rapport, of seeming illumination and peace. The mystical doctrine is the theory that this state of rapport is an experience of ultimate reality, of God. The experience, viewing it psychologically, occurs not only in religion but also in aesthetic contemplation and in romantic love. The mystical doctrine is an interpretation attached to the experience.

Many have the experience of intense religious emotion, or what might be called the mystical quality of exalted feeling, who do not accept the doctrine. An analogy may be found in the fate of other doctrines, such for example as that the earth is flat. The experience of ordinary vision gives the impression that the earth is flat and that was the prevailing theory down to relatively recent times. The common experience is still that of seeing the earth as flat but the theory that it is flat has been discarded from scientific thought. The doctrine of mysticism, which is that religious ecstasy is union with God, is prescientific. It was formulated long before there was any science of psychology to furnish an analysis of the phenomena. In this it belongs to the age of astrology and alchemy. It may indeed still be held as a theory, much as the idea of a flat earth is said to persist in some quarters, but it can no longer claim the certainty or the factual reality which belong to the mystical experience.

The doctrine of mysticism has also overemphasized and misinterpreted the fact of mystery in religion and has thereby opened the way to occultism and obscurantism. It is one thing to recognize the complexity and inexhaustibility of experience and quite another thing to identify that aspect of experience with the only significant reality. "The flower in the crannied wall" does indeed have hidden roots and it has vital relations with the rock and the air, the wind and the distant sun, and all conceivable reality perhaps, but no emphasis upon the subtle and unknown features of its life justifies the assumption that those impalpable relations of its being are more real or more significant than its evident beauty of color and fragrance or its delicate texture under the touch of a sensitive hand. The doctrine of mysticism tends to discount the known and the sensuously given for the unknown and the inaccessible. Therefore it minimizes science, both in its function of observation of fact and in its systematic, rational interpretations. It assumes to leap a gap from the world of sense and reason to a supersensuous reality rather than to follow a continuous path into the more complex and vast implications which natural reflection and imagination project. Science and common sense hold that a bird in the hand is worth two in the bush and they also agree that the two in the bush are more convincingly real than any number merely wished for or conjectured, or presented in dream or in ecstasy.

There is a striking inconsistency between the mystic's doctrine of the supersensuous and superrational objective which he seeks, and the methods by which he endeavors to reach it. The Mystic Way is traced by many mystics. Its stages are described variously but there are always at least three. There is first the awakening to the realization of the possibility of a deeper insight or a fuller life, then the purgation and struggle to rid the self of old habits and limitations, and finally the illumination, the vision, the spiritual marriage. Yet the mystic is compelled to regard the technique of the Mystic Way as without any necessary relation to the mystical ecstasy. He is forever employing these means but always insisting that they have no causal relation to the result sought. The great experience is not subject to any law or technique. The wind bloweth where it listeth. Yet the great mystics, such as St. Theresa, Suso, and St. John of the Cross, were diligent for many years in the cultivation of certain practices and auto-suggestion which naturally tended to prepare for the states of emotion which they finally achieved. It is undoubtedly true that they did not consciously depend upon these practices to win their goal, but it is nevertheless clear to the psychologist that the mystical ecstasy was the natural outcome of the mystic's temperament and his Way of Life.

It is surprising to what an extent the mystic is able to ignore the sensuous elements of his experience while so devotedly employing the very means of heightening and multiplying the most intense sensuous experience. What do his hair shirts, beds of spikes, fastings, and vigils accomplish if not pricks and pangs, twinges and turmoils, in his physical being? The fact that his interest and attention are centered upon sublimations or transfers of these bodily sensations no longer obscures the dependence of the alleged spiritual states upon these poignant physiological stimulations. The very methods employed to conquer and deny the flesh only magnify and intensify its contribution to the subject's consciousness. This has been carefully shown also with reference to the place and power of sexual desire. At the very point of its supposed suppression and elimination, it is constantly appearing in the mystic, and it emerges even in terms which aid in its identification, such as wooing love, tender embraces, and spiritual marriage. The fact that the mystic himself is thoroughly convinced that these terms are only metaphors, and really believes that he escapes the bondage of the body, only shows how innocent men may be of the actual nature of their most intimate states.

The doctrine of mysticism insists on identifying a vivid emotional experience with the experience of ultimate reality, that is, with God. But it is thereby prevented from any further description or interpretation except in negative terms. It cannot be conceptualized or translated. It has immediacy and ineffability. It is indescribable. To affirm that it affords union with God is simply to express in other words the fact that there has been a vivid emotional experience.

Psychology does not deny the mystic's ecstasy. It accepts that ecstasy as a fact but shows that it is conditioned by the social environment and by physiological processes. Instead of being the guarantee of supersensuous, infinite Being, it is the accompaniment of describable and at least partially controllable conditions. A person may, therefore, have very vivid religious experience without being a mystic, and it is the failure to discriminate between emotion and theory which leads to the common error of claiming that all genuine religion is mysticism.

Religion may be described as the endeavor to realize the fullest possible life. As such it is concerned with every conceivable aspect of experience, with the struggle for daily bread and with the finest ideals of social justice and of spiritual harmony and beauty. It seeks these ends by practical means in the actual world and it also supplements the matter-of-fact aspect of experience with projections of ideals and imagined goods. These projected ideals vary all the way from social engineering plans based on real achievements to the most airy daydreams. Religion is normally action in which life presses forward toward the attainment of its most inclusive ends. In such a world as ours this action is constantly obstructed and often thwarted. There is consequently a constant impulsion to substitute the imagined for the real. So long as the picture in the imagination is recognized as such and is kept, like a captive balloon, in relation to the actual world from which it is projected, it may serve the valuable function of art to afford an idealized completion of deferred, complex action, and also to sketch possible lines of fulfillment. The mystic depreciates the actual course of experience and the conscious plans and pictures based upon it. He exaggerates the dreams and emotions which crowd upon him and substitutes them for practical interests and rational hopes. He makes them identical with reality and regards the world of sense and reason as illusory, or at least as relatively insignificant.

It is not difficult to understand, therefore, why mysticism flourishes in epochs of transition, such as followed the break-up of Greek civilization, and the disintegration of the Mediaeval world. Another such epoch is upon the Western world at the present time. Modernism, in the form of historical criticism and evolutionary science, disturbs every religious communion. The reconstruction in customs and ideals which this modernism implies is so radical and so deep-going that it has unnerved many sensitive souls who have been dislodged from the old views but do not follow through to a satisfying conclusion. Mysticism claims to present a more direct path to the goal of assurance and peace. When confronting the problematic situation which only analysis and experiment can deal with, albeit tentatively and partially, mysticism opens the door of emotion and asserts that what is found there is reality itself and that the emotional state is its own sufficient guarantee.

This relapse into mysticism is illustrated by recent writers who decry social service ideals and methods in religion, and insist that the worship of God is the chief and essential religious interest. They have become impatient of bread-lines and gymnastic exercises and now turn again to psalm-singing and stained glass. The enthusiasm with which the churches entered into social reforms on behalf of child welfare, public health, education, and such like, has been checked by questionings as to whether these are the proper interests of religion. For a time the concreteness and reality of these interests roused great enthusiasm and gave popular religion a new impetus. Perhaps it was the war and its direful aftermath which led many religionists of the social ideal to fall back into more or less conscious despair of realizing that ideal by rational, practical means. In any case there is in recent theological literature a renewed emphasis upon the non-rational aspects of religion, and the cultivation of piety through "the enrichment of worship." The avowal of mysticism has lately been made by some of the most scholarly theologians of America.

It would be presumptuous to say that they have not sufficiently acquainted themselves with the recent psychological studies of mysticism. But at any rate they have not been convinced by those studies. The question is, therefore, pertinent as to whether it is possible to restate the religious life in terms which may yield for the enlightened modernist both the realism of actual social problems, and the sense of the richness and the mystery of profound religious experience. It may be that upon the answer to this question depends the future of religion. The separation of these factors leaves religion a thing apart from reason and from work-a-day life. It becomes subject to the weaknesses of otherworldliness. On the other hand it deprives science and social work of the dignity and ideal significance which properly belong to them.

The answer to the question proposed must be of the briefest, in this paper. In outline it is this. The analysis of mysticism shows that its appeal lies in its psychological quality of vividness and emotional satisfaction. But this is a quality which belongs in varying degree to all vital and urgent action. It rises to its maximum in normal life where the major crises of man's spiritual struggle are embodied in the finest forms of art. Art illuminates and consummates what is implicit and inarticulate in actual experience. It releases emotion by presenting as immediate and accomplished what is as yet only partial and vaguely promised. It is through this function of art that religion may find the answer to its perplexity, for religion in its most vital forms, not only strives to heal the ills of life, but contemplates in imagination and by faith a fairer future and a more satisfying total scheme of things. If it merely devotes itself to practical life it falls into the humdrum of drudgery. If it becomes absorbed in its dreams it lives in a world of detached pictures. A writer has lately pointed out that this fate is already apparent in our modern civilization where religion and industry stand in such sharp and painful contrast, "religion being all pictures and no vital work, while industry is all drudgery and no pictures." But occasionally the sessions of labor unions are lighted up by the gleam of a great idealistic passion, and at least one American political convention uttered its convictions in hymns, and one representative scientist has urgently called for poets to put the great discoveries into the ampler setting of metaphor and meter.

The essential psychological elements which constitute what one writer calls "mild mysticism" are to be found within the actual world of science and of common sense. It is a vastly great and complex universe, from the revelations of the microscope to those of stellar photography, and from the behavior of the amoeba to the inventions and creative art of man. It is also a world of endless mystery, of change, of coincidence and order. Apparently it is a world of measureless possibilities both for growth and for catastrophe, in short "a precarious world." It is such a world of hazards which gives play to the spirit of adventure and makes the winning of goals so thrilling and so precious. It may be true that reason shines with a very limited and imperfect light in all this immensity of force and passion, but it is nevertheless a light within whose gleam man has discovered some of his dearest treasures, and by which he daily guides his way into further discoveries and achievements. The fact that experience is partial is not equivalent to its being illusory. The sense of reality within experience is certainly as worthy of respect as the claims of union with reality beyond the sphere of knowledge and of sense.

The new conceptions of life and of its appreciable values labor under the burden of their novelty and seeming insecurity. We are too much inclined to confuse the old and the familiar with the truer and the better because our appreciations have been shaped by them through an established tradition. It may require a long training to give us the same familiarity and freedom in the new heavens and the new earth. There are needed new hymns, new scriptures, new symbols, a new vocabulary, and new art forms of every kind, to give us full access to our new spiritual realms, but it is the grossest form of disbelief and infidelity to doubt that these may be achieved and thereby furnish the mind and the heart of enlightened men a religion of genuine comfort and inspiration.

SECTION 3

Time: Thursday, September 16, 9.30 A.M.
Place: Gore Hall Dining Room
Subject: Philosophy of Mind, with Special Reference to the Nature of Community between Minds
Chairmen: H. N. GARDINER, Smith
DURANT DRAKE, Vassar

THE CATEGORY OF SELF-TRANSCENDENCE AS AN ESSENTIAL ELEMENT IN THE CONCEPT OF PERSONALITY

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I

THE epistemological problem, as traditionally formulated, gives rise to an antinomy. On the one hand, significant existence as determined by the categories, though real, is real only to consciousness; inasmuch as the categories themselves, which are the criteria of reality, can serve as criteria only before the tribunal of the consciousness from which they have sprung. On the other hand, it is a necessary postulate of the objective attitude that significant existence is *not exclusively* dependent on the categories of thought, even though the obverse of this postulate, viz., that significant reality may contain elements independent of the categories, turns out to be meaningless when it is reflected that, if such elements did possess meaning, the meaning could find expression only in terms of some category or categories. More briefly the antinomy may be stated thus: *Significant reality must be dependent on consciousness in order to be significant, yet independent of consciousness in order to be real.*

Perhaps in general the thesis of the antinomy could be accepted and the antithesis discarded by all who, starting from epistemological postulates, were not wedded by profession or temperament to a naturalistic attitude; but when the significant reality in question is interpreted to be a person or self, the antinomy is not so easily disposed of. For in spite of the demands made by epistemological postulates, the proposal to interpret other persons as existing not autonomously but relatively to the categories of my own thought leads to solipsism, which is philosophically hypocritical and logically barren.

II

It is often supposed that the argument by analogy offers a plausible path of escape from solipsism. When my own body functions in a certain manner, it is said, I am conscious of being conscious; accordingly, when other bodies independent of mine function in a similar manner, I infer that they are connected with conscious processes independent of my own consciousness.

The fault of this argument as it is usually understood is its disastrous attempt to leap from epistemological objectivity to metaphysical substantivity, which there is nothing in the premises of traditional epistemology to justify. Perhaps such a leap is justifiable and even necessary, but the mechanism of bare logical analogy is inadequate to effect it. For, granted that the visual perception of my own body functioning in a certain way is connected with a group of kinaesthetic and visceral feelings that largely constitute what I call my mind, it might be shown by analogy that the visual perception of another similarly functioning body should tend to revive such kinaesthetic and visceral feelings in my own imagination; but how could it lead to the hypothesis of similar feelings in another person without the prior assumption that other persons exist? Thus the analogical argument has failed to show in what sense the significant existence of other persons is possible.

Still the failure of the argument to supply a positive content to the concept of an independently existing other-self must not be allowed to obscure its formal and ancillary value in the quest. For it is inevitable that the other-self must be essentially like my own self. Analogy between physical organisms does not prove this likeness, but the likeness is nevertheless there, or the other-self would be meaningless and certainly misnamed. Analogy thus serves as the key to the deduction of whatever concept is essential to the significant existence of the other-self; for it suggests that the same concept is essential to the significant existence of my own self, and that the deduction must be formally similar in both cases.

III

Now what is the character which, while serving as a formal condition of significance generally, finds its most conspicuous expression in the significance of selfhood? There are, of course, many forms of significance in general that are not especially pertinent to selfhood. Time, space, and causality, for example, while probably discoverable among the peripheral implicates of selfhood, may be assigned a relatively subordinate position in the structure of the concept. Indeed, when their importance is overstressed, they are likely to becloud what is most essential to the notion of the self, as may be witnessed in the philosophization of behaviorism. Other categories, such as substance and finality, while perhaps more basic ingredients of selfhood, fail nevertheless to account for the autonomy which is the most essential ingredient of all. For these categories, when expanded, can mean only that an object of consciousness has respectively substantival and teleological significance for the consciousness of which it is an object, not that it may have a being and a purpose independent of that consciousness. In other words, they evade the problem involved in the epistemological antinomy, being irrelevant to the paradoxical but insistently apparent fact that consciousness does somehow overstep its own boundaries. Yet unless the truth of the paradox is admitted, either the solid bracing presence of an "outer" reality or the refinements of an epistemological criterion must be renounced.

Accepting the paradox, then, what are its implications for epistemology? Our answer must be that, if this tendency to overstep its own boundaries is characteristic of consciousness and of cognition generally, the tendency may properly be interpreted on epistemological premises as a category or structural form of cognition. The deduction of such a category, which I shall call the *category of self-transcendence,* will accordingly be effected by demonstrating the universality for cognition of the tendency that it represents.

As indicated in the preceding section, the deduction of the category of self-transcendence must demonstrate that self-transcendence is characteristic both of the knowledge by which I know myself and of the knowledge by which I know other selves. Although the knowledge is in both cases fundamentally similar, there is a contingent facility in knowing my own self, due to its greater, or at any rate more continuous, proximity to, and tendency to be identified with, the field of consciousness that sets out to know it. My own self and the consciousness that seeks to know it tend to be materially one: a tendency that is less prominent in my knowledge of other selves. Hence the first task will be to demonstrate the tendency of consciousness materially to transcend its limits in the cognition of its own conditions. This subjective deduction of the category must then be followed by an objective deduction, which will demonstrate that it is a characteristic of cognition generally for its reference to transcend its content.

IV

SUBJECTIVE DEDUCTION OF THE CATEGORY.

1. In a cognitive situation of an introspective sort there is a logical distinction between consciousness-as-subject and consciousness-as-object. For it is conceptually necessary to regard the objectified and known conscious states as implying in some sense a subject that knows them.

2. Not, however, in the sense employed by traditional metaphysics is such a distinction permissible, i.e., consciousness-as-subject is not ontologically distinct from, nor independent of, consciousness-as-object. For (a), in general, to the extent that consciousness-as-subject has any positive meaning at all, it is, on epistemological premises, potentially consciousness-as-object; and (b) in any particular cognitive situation an attempt to grasp the subject of cognition succeeds only at the expense of transforming what may have been the subject into some kind of definitive object.

3. It seems evident, therefore, that *the nature of cognition is such as formally to transcend itself in the implication of its own subject.* This proposition represents the *formal* aspect of the subjective deduction. And since on epistemological premises every demonstrably universal characteristic of cognition is to be regarded as a category to which its objects must conform, we may conclude that self-transcendence is a category to which all objects must conform in their character of being related to a subject of cognition.

4. The material condition of subjective self-transcendence is found in the temporal nature of the self. The self that I can know directly is always a fraction of a second old, while the "I" who know myself am living in the ideal present. Thus the formal relation between consciousness-as-subject and consciousness-as-object has a material correlate in the relation between the living subject of a particular cognition and its later objectified corpse. Whence we may conclude that *it is a universal characteristic of experience materially to transcend itself through time.* This proposition represents the *material* aspect of the subjective deduction.

V

OBJECTIVE DEDUCTION OF THE CATEGORY.

1. Since the meaning of an object can be defined only by its relations to other objects, it follows that the full significance of any object transcends what is immediately given. Hence it is evident that the full meaning or the connotation or the value-aspect of an object is logically distinguishable from its focal meaning or denotation or factual aspect.

2. This is not to say, however, that the valuational and the factual aspects are ontologically distinct. Indeed to speak of a metaphysically subsistent "realm of values" is misleading. For (a) values are relative to the objects of consciousness that are valued; they subsist as tertiary qualities of objects; and while it is conceptually possible to regard them as forming a class, yet (b) when values are thus explicated, they assume the status of facts (i.e., we may say, "it is a fact that such-and-such represents a value") and as facts they generate further connotations of their own.

3. Accordingly *it is a universal characteristic of cognition to transcend itself ideally in meaning*. The objects of cognition cannot be absolutely determinate, for an assumed determinate object or group of objects will be transcended by its own connoted meanings. Self-transcendence, therefore, may be properly regarded as a category under which falls the cognition of any object whatever.

4. In pursuing the subjective deduction it was found that the material conditions of cognition were pertinent to the inquiry. In the objective deduction, since there is no direct continuity between the ground and the reference of cognition, such considerations are irrelevant. Thus it does not affect the argument to urge that the valuational overtones of an object are dependent on physiological conditions; for physiological and analogous explanations are intelligible only on naturalistic premises, and when translated into the universe generated by epistemological postulates, they become interpretable as objects of consciousness attended by emergent overtones of their own.

VI

The subjective deduction was observed to have, owing to its tendency to self-reference, both a formal and a material aspect. Corresponding to this duality of aspect, the relation of subjective to objective deduction is twofold also. In its formal aspect the subjective deduction provides a logical pattern which the objective deduction must follow; in its material aspect it contributes a personal content to the general form that both subjective and objective deduction (but more characteristically the latter) supply.

In contributing a content to the category of self-transcendence the subjective deduction is obliged to suffer something of an empirical transformation. The transition from consciousness-as-subject to consciousness-as-object may be interpreted as a transition from a sympathetic to a critical attitude, thereby gaining in concreteness what it loses in precision. From this interpretation of the result of the deduction two conclusions may be drawn.

1. The transition from consciousness-as-subject to consciousness-as-object is reversible. It is inaccurate to consider the self as strictly dimensional or as marking its products indelibly with the stamp of objectivity and thereby forfeiting possession of them in essence forevermore. The boundaries of the self are indefinitely flexible, thus rendering a virtual reidentification with the self of what has been objectified no less possible than their initial estrangement.

2. As a datum becomes objectified and thereby removed from its status of immediate identification with the subject, there remains attached to it a residuum of subjective warmth, the amount of which varies roughly in proportion to (a) the recency of the object's emergence and (b) the facility with which it can be reidentified with the temporarily abandoned subject.

VII

The residual warmth attached to an emergent object supplies a content to the self-transcendent form of the object. This union makes possible the significant existence of a field of subjectivity independent of my own and having two characteristics: (a) it transcends in meaning the more immediately apprehended object that symbolizes it (form), and (b) it is approximately identifiable, though never completely or absolutely identical, with my own field of subjectivity (content). The cognitive form of self-transcendence and the cognitive content supplied by potential identification through sympathy with my own ego are the fundamental conditions of the significant existence of an other-self.

But although fundamental, they are not the only conditions. For the standardized notion of a self, held by a majority of adults, is complicated by additional elements which convention demands. Foremost of these are the visual, auditory, and tactual perceptions which constitute the awareness of a human body. Such conditions play a less important part in the social consciousness of children and savages, who find it natural to personify objects with a comparative lack of discrimination; but among civilized adults they are accepted as an unquestioned criterion. Indeed, so influential does the testimony of the so-called "outer" senses become, that the perception of a normally functioning human body alone is quite generally considered sufficient evidence of the existence of an other-self. Yet it must be remembered that physical correlates are but the husk of personality, a significant apprehension of which would not originally have been possible in the absence of the appropriate objective and subjective conditions.

VIII

SUMMARY

1. Two sorts of continuity are essential to a significant concept of personality: (a) an "inner" continuity between consciousness-as-object and consciousness-as-subject, or between determinate experience and its hidden, noumenal source; and (b) an "outer" continuity between the focal object of consciousness and its peripheral implicates, or between what is actually and immediately a datum of experience and what subsists only as the vague, connotative fringe of an actual datum.

2. The "outer" continuity, which the Objective Deduction has established, supplies consciousness with the formal possibility of realities not actually present to it.

3. The "inner" continuity, established by the Subjective Deduction, supplies to the formal possibility of absent realities the concrete content of selfhood. This content is drawn not from bare analogy or any such logical chicanery, but from the phenomenon of social or shared experience, which is the natural expression of the sympathetic attitude. If the sharing of experience were complete and constant, there would be a surfeit of immediate acquaintanceship with selfhood but no possibility of formulating and critically knowing it; while, on the other hand, if the sharing were non-existent, the category of self-transcendence would be empty of that subjective warmth by virtue of which its lucid barrenness is transformed into the more clouded but richer and more concrete notion of personality. Because of the varying degree, however, to which experience is shared the self becomes habituated to the fluctuations of its boundaries and thus becomes cognizant of a field of cognition not wholly identical with it.

4. It is ordinarily the fate of the concept of the other-self to become hypostatized. For when in the passage from the sympathetic to the critical attitude my relation to a fellow-experiencer changes from one of unity to one of opposition, it is a natural tendency to crystallize this opposition by hypostatizing the diverging fields of experience as respectively "me," localized within an intimately known body, and another substantive reality similar to me, localized elsewhere in space.

THE NATURE OF MIND AND THE REALITY OF GENUINE INTERCOURSE BETWEEN MINDS

J. A. Smith
(*Oxford*)

IN order to undertake with hope of a profitable result any inquiry into the *nature* of anything, we must start not only with an agreement *that* that something is, but with some preliminary notion or account of *what* it is. So it is with what we call Mind. If we begin in ignorance or dissension as to what Mind is, we can never expect together to reach a definition of its nature. Before we attempt to formulate a definition of its nature or essence, we must procure and agree upon some description of it — its phenomena or appearances. At this prefatory stage we can afford to be less exacting than we must be when we face the properly philosophic problem of determining its nature or essence, but we must exert ourselves to get the best possible description or descriptions of it.

Where is such a description to be found? Amid the welter of discordant opinions and views the search for one on which widespread agreement may be looked for seems a well-nigh desperate enterprise. Yet I believe that such a description or set of descriptions is extant and available, and I here express the deliberate conviction that what we desiderate or require is to be found, not chiefly in the treatises of classical philosophers, still less in the textbooks of canonical psychologists, but in the great masterpieces of the fine literature of the world, in the works of its historians, orators, poets, and writers of imaginative and artistic literature generally. It is to them we must go to learn what Mind is, sure to receive from them the fullest, the richest, the subtlest, and profoundest descriptions of its ways and works. In the works of the great English poets, novelists, dramatists, essayists, of our own and earlier times, we here are provided with an inexhaustible treasury of descriptions of what Mind is, and shows itself to be. The same is true of our colleagues and fellow-students in other lands and of other tongues.

Doubtless to be used for our purpose of attaining a definition of the nature of Mind this garnered wealth of knowledge must be digested, epitomized, set in different order and system, converted from poetry into prose, from literature into science. To carry out this task of condensing the multifarious riches of description thus so abundantly offered to us in our literature into succinct and portable formulae is far beyond any man's powers, and *a fortiori* beyond mine. But these great artists with their high gifts of speech give us large assistance, and a host of humbler but still helpful critics guide us further along the path towards our goal. For myself I can here make but a slight beginning, and can exhibit not the result but the method, and of that but the first step or two. Yet the poorest specimen may exemplify and illustrate the pattern of the whole, and perhaps *ce n'est que le premier pas qui coûte.*

In this course of inquiry we may begin anywhere we please, and here it pleases me — as I hope it may please you — to begin with the works of one who knew the depths of the human mind and could express his knowledge of it, the great romantic poet of the early nineteenth century, — William Wordsworth. What do we learn from him of what Mind is, prior to and apart from any theory or definition of its nature? Definition or theory of its nature he has none, he expresses none, or, if he does so, it is only in halting and uninspired passages of his works. Yet "Mind," as he assures us, was ever "the haunt and the main region of his *song*." It is with that, with the view and presentation of it, that as a singer or poet he was primarily and centrally concerned, and throughout his whole life. It is this that "in song" he labors to express and does express, — as I have said, describing it and telling himself and us what it is, what it experiences, effects, and enjoys. Now to him so studying it, it manifests or reveals itself from the first as that which beholds with ever opening eyes a character in or over things which we know and love as Beauty. Mind appears as copartner in the universe with a world at first seemingly external to it, the countenance of which is suffused with Beauty all over, the two together making up the whole universe of being, each counterpart exquisitely fitted to the other, so that with the blended might of their several powers they accomplish a work which can be called by no lower name than creation. Mind and Nature work together to bring out into more and more actuality and presence the extraordinary Beauty, which is the evidence to Mind of what at first lies hidden in itself and its partner Nature. The whole life and existence of Mind may be described as the endlessly progressive search in itself and its whole environment for Beauty, a seeking which is also a finding. Such is the vision which Wordsworth sees and expresses of what Mind is and does: it is to him essentially the discoverer, the describer, the contemplator, and enjoyer of the beauty of the universe within and without its own being. That is what it is, so far as what it is is describable and expressible in song.

But he is well aware that this is not a complete or adequate or final description of what Mind is, and *a fortiori* falls short of being the full account of its nature. There dwells in it another and a higher power, which can create and know something beyond Beauty, something more deeply rooted and seated in its nature and in the nature of what surrounds it. "Wedded to this goodly Universe in love and holy passion," Mind can beget and behold products of a higher order and "a greater glory than the ideals of imaginative fiction ever fancied." Reason or understanding — "the discerning intellect of Man" — can raise Man and his world to still higher levels, nearer to that far-off consummate experience, baffling all description or definition, in which the unity of all Being is achieved and realized and enjoyed

> "As indistinguishable as the cloudless East
> At noon is from the cloudless West, when all
> The hemisphere is one cerulean blue."

But that great consummation belongs to the future, not to the present, of Mind; only when it is reached will Mind have entered into possession and exercise and knowledge of its now partly obscured, but constantly self-revealing, nature. In the meantime "we know what we, minds, are; we know not what we shall be." And what Mind is, is in part the creator and beholder of Beauty, and later of whatever Truth and Goodness we discover or create and contemplate.

Thus we learn from Wordsworth — and well is it for us to hearken to his teaching — that the first and plainest and most certain evidence of what Mind is is to be found in the experience of Beauty contemplated and enjoyed. Beauty is the sign-manual of the presence and power of Mind in or on its works. Seriously and deliberately I propose to take the experience of the beautiful as the earliest and most fundamental indication of Mind's presence in the Universe, its most obvious, though at the same time its most superficial or insignificant, characteristic, something more primordial in its being than, say, even "sensitiveness" or "docility" or "initiative." Beauty is a character or feature of things which nothing but Mind can create or behold. This is a doctrine which gains not loses by restatement in bald dry prose. For I venture to maintain that what we, when we find it on a large scale, call Beauty is a necessary character or the smallest and most humble item or fragment of the real which can be present or an object to Mind at all. For what is "Beauty" but a beautiful synonym for what is by common agreement essential to any and every datum of sense or imagination, viz., the integration of a boundless multiplicity and variety of parts into a single and singular whole, in which all the variety is merged without loss and reëmerges in an unbroken quality which has no antecedent or parallel elsewhere, constituting a characteristic individuality or uniqueness? The generation of such a unique datum cannot be regarded as a mere prolongation or magnification of what went before at the inframental level or premental stage: it is a miraculous birth, one of whose parents is the Mind in and to which it occurs and becomes present. The Mind is no mere passive spectator of its coming to be, it is a co-creator of it. Without the help of Mind it is powerless to be born, and Mind if it does not beget it, at least delivers it from the womb of Nature. In doing so, Mind endows or clothes it with beauty. It sets it in a light "which never was on sea or land," and invests it with a radiance that comes from within itself. That is the least we can say of any event or complex of events in the universe in which Mind is necessarily involved.

Thus the earliest and most fundamental power of Mind is that of expressing or eliciting out of its surroundings a character of things which without it would remain forever unexpressed and so non-existent or as good as non-existent, integrating into ever new individual wholes what otherwise would forever continue dispersed and distracted, and so impotent. In this work or business no Mind is restricted to the expression of anything for and to itself alone: it effects a common or public work. From the beginning to the end its expression is for other minds, all other minds, as well. Its creatures or offspring enter a public world, and the expressions of them are failures, unless they are published abroad and so communicated. The results of the acts of expression of this or that mind never stick wholly in their originators, but fly abroad, cross the intervals that separate mind from mind, impinge upon recipient minds, in which they reëcho or rather are regenerated or reborn, or recreated. It is surely the plainest and most indisputable of truths that as each apparently isolated mind expresses to and for itself the meaning or import of the incrowding materials of its experience, it sets at the same time the whole inter-mental ether into commotion and the entire company of minds reverberate its internal agitations, however dully and obscurely. Whether that ether be physical or no, it unites as well as severs the minds enisled within it: each is in thoroughgoing rapport with each and all. Mind is from the beginning (and, therefore, throughout and to the end) something single, whole, and active, in a degree or manner in which nothing else in the Universe is (if indeed there *be* anything else). Its wholeness overrides the pluralization of itself into Minds, and even the pulverization of these into swarms or series of atomic experiences: it permits the interpolation of non-mental media between one mind and another, and within each of gaps between its several or severed experiences. But for all this its integrity is not annihilated, it remains one indiscerptible Mind and no final or irreparable breach occurs in its self-communion and self-communication. Thus despite all its particularization or individualization it continues to be one Mind and one World: messages pass from part to part of it across all gaps and over all barriers: the estranging ocean is penetrated by lines or filaments of communication between island and island. This is simply the plainest fact and most constantly evidenced in our experience, though the extent and the manner of it justly excite our perpetual wonder and curiosity and speculation. It only appears to us an inscrutable mystery when we forget or wilfully ignore what the nature of Mind, and, therefore, of minds, is.

What we may learn from our great imaginative writers is to think habitually of minds, not as monads without doors or windows, to one another, but rather as partial differentiations from or concentrations within a whole and single Mind, in which they remain rooted, there living and moving and having their being, and through their union in it maintaining, extending, exploring, enjoying inexhaustible communion and communication with one another. It is surely an error to suppose that the conditions of such communion and communication are not "given" but have to be instituted by some impossible "social contract" between isolated individuals. No, from the beginning, throughout and to the end, minds are indissolubly linked in thoroughgoing reciprocity of sympathy and synergy. All that they can do — and it is enough, is to develop the given situation in which they stand, to explore its possibilities and avail themselves of its opportunities. Even in the secret chambers in which each elaborates the shocks and thrills which reach it from the Universe outside into apparently private objects of sense or imagination, each mind still works with and for all others, and, laboring for its private advantage, steadily, contributes to the wealth of all. At that low level of their activity where minds seemingly create for themselves alone the tiny and perishing objects which present themselves to the eyes of their senses or imagination, none works by and for itself only. Their microscopic pictures migrate into the public gallery, enhancing and enriching the beauty of the common world, and carry with them strength, instruction, and delight.

The view I have thus, on the authority of the great imaginative writers of our time and place, given of the world of Mind or Minds is, of course, quite inadequate as an account of it. It is, or contains, at best a description of that world, and but prefigures that account of its nature which in and for philosophy we seek. Yet it lies on the way to what I have called the definition of Mind's nature and of the world or environment in which it displays and enjoys its nature in at least relative clearness and fullness. Each such description is a light thrown forward on our path, and the far-off goal of our journey begins to show itself to our speculative gaze; its outlines begin to take on an increasing determination and fixity. Trust in the guidance of such leaders delivers us from the "beggarly elements" of popular psychologies, with their random collections of trivial anecdotes, and the pseudo-scientific tabulations of results got by the circulation of questionnaires among the unobservant, the unimaginative, the uneducated, and the inarticulate. Not there but in the masterpieces of our literature lie stored the garnered treasures of Man's painfully acquired knowledge of his own Mind. There our philosophic predecessors in the quest for a definition of its nature have found true materials or data, out of which they have fashioned or distilled an account of its nature which will stand criticism, and therewith an account of the nature of that opposite or other which together with it make up the universe. Different — kaleidoscopically different — as may appear the manifold expressions which on reflection have been given to that account, I believe that in essence the answers more and more tend to unanimity and identity. To be brief and dogmatic, we are ever becoming more and more certain that what surrounds and presents itself to us is not alien in nature to us, but is homogeneous with our own inmost being, is one in nature with that which is the viewer, the judge, and the knower of it, that is, is itself Mind or minds at a lower level of existence than that to which *we* have been permitted or privileged to rise. In us

Mind best and most clearly reveals its nature, and the nature which it there and then reveals to us as its proper and eternal essence is that which we name "consciousness," or, with our audacious anticipation of its achievements to come, "self-consciousness." Yes, it is, as it has ever been, the nature of Mind to be "self-conscious," conscious of its own nature, of its inherent powers, of the manner of their exercise, of their effects or fruits. This its nature, with a knowledge of it co-involved, it has possessed from the outset of its existence, having had it assigned to it as its property and prerogative at its first outbreak, or inburst into the Universe. If it be true that at this present date Mind (or a mind) has reached self-consciousness (and who will be hardy enough to deny it?), then in it — in its nature — self-consciousness was present, germinally or seminally, from the start, present, as I have said, in its very first infantine glimpses of the beautiful — not before. In such an experience Mind was begotten — is eternally, because perpetually, new-born — and with it was co-generated the world in which it dwells, and therewith it made its first step towards, or rather in, self-consciousness.

This, then, according to me, is, beneath the superficial difference of vocabulary, the concordant deliverance of modern philosophy ever since the sixteenth century, viz., that the nature of Mind is to be self-conscious, to be aware, as nothing else than Mind is or can be, of its own nature. That is the first article in the modern philosophical *Quicumque Vult.* It is impossible for any thoughtful mind to go back upon it. The nature of Mind is better known to us than that of anything else whatsoever, everything else being known to us only in the light of that knowledge and as being a lower or less developed form of it. The nearer world of what we call other minds consists of the many-faceted reflections of our own mind, and the remoter face of external Nature itself is also but that Mind mirrored outside us. The whole Universe is the self-expression of Mind's nature to itself, and each reflection reveals in itself an otherwise hidden feature of Mind's own countenance. To deny or forget it, to attempt to substitute for it any other definition of the nature of Mind, is to deviate from the main track of modern thought.

There is a sort of philosophical toy of which much use has of late been made to bring home to learners this new conception of the world as it is in and for Mind. The elegant device by which mathematicians define to themselves and their pupils the world of Numbers as a self-mirroring system, every proper part of which repeats the structure of every other part and of the whole, prefigures, but does no more than prefigure, the nature of the world of Mind; does no more for the world of Number than wearisomely reiterates an empty truism, while that of Mind ever more interestingly and valuably explicates an inexhaustible wealth of truth growing more and more toward a rich and varied self-consciousness. The most distant and dispersed movements of the Universe converge and conspire towards the realization by Mind — in fact and knowledge — of its own hidden but always self-disclosing nature. History — human and natural — is the flowing record of Mind's coming to itself, and its kingdom.

In the records of human history we read the clearest and most convincing record of the trend of this universal movement. That record is always fragmentary and episodic, its text often ambiguous or obscure, but its main or general sense appears certain, or at least there is but one interpretation which relieves it from the doubt that it is "a tale of sound and fury signifying nothing." That interpretation is that it is the record of the increasing struggle of Mind, single but working in and through an endless succession and boundless multitude of minds, advancing and securing for each and all the maximum of self-consciousness possible under conditions constituted by its previous triumphs and failures. This is a goal that cannot be reached or even approached in isolation of its seekers from one another. The advance is essentially a collective and coöperative undertaking and to it entire communication and interaction between such minds is an indispensable condition of success. There is no end to its possibilities and potentialities. The world of Mind is the theatre of an infinite commerce in which all mental commodities circulate freely and the private gains of each mind flow into the universal stock, so that the level of Mind rises with unbroken constancy. Through the coöperation and even collision of wills, through the conference and clash of minds, the light of Mind grows ever and ever towards the perfect day. In history Mind is making itself self-conscious, conscious of itself or self-conscious. This is a process in principle endless and, however far it proceed, it will always find or create new worlds to conquer. Our Nature will always find itself surrounded by what is other than it, i.e., with what is unselfconscious or even unconscious, but nevertheless (to borrow the technical terms of biology) that other, begetting Mind behind and before, linking in the interstices between mind and mind or as it were in the pores and gaps within Mind, is the recessive factor in the Universe, while Mind is the dominant factor, subduing and transmuting it to the increasing service of Mind's self-creation which is one with its self-discovery or self-revelation. While it endures the Universe is in travail, all its striving bent and directed towards the generation of a Mind completely conscious of its own nature as thus in outline already foreknown with an indefectible certainty.

Nothing less or lower than what is self-conscious can justly be called by the name of Mind and beyond what is so nothing is Mind either. Self-consciousness is the very nature of Mind and no otherwise can its nature rightly be defined. Because its nature is such it necessarily differentiates itself into minds, which, no matter how individuated, never fall apart into isolation or can be cut apart from one another by any crass or recalcitrant non-mental or inframental media, but remain in unbroken rapport, communion, or communication with one another. The time process is, or contains, an unceasing development of this situation, in which minds in their several efforts to realize their natures extend and deepen their reciprocal influences on one another so that the whole which they form rises to higher levels of self-consciousness in which each and all partake. The experience of such Congresses as the present shows how, by getting each better to know the minds of others, we come each to know better his own mind, and so the Mind which is in all comes better to know, that is to be, itself.

IMMATERIAL NON-MENTAL REALITY

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THERE is a postulate or dogma underlying much of our thinking, to the effect that what is real is either body or some implicate of body. For instance: although mind is regarded by most as itself quite immaterial, it is nevertheless believed to be an implicate of the body — an integration of the body's responses, a result unpredictable cropping up out of these, or something of the sort; yet it is generally agreed that without body there would be no implicate and no mind. The professed materialist acknowledges this postulate or dogma without shame; the dualist and idealist usually accept it tacitly, avoiding the charge of materialism by declaring that the implicate is different in kind from the implier. Yet all alike take body in space and time as the primary if not the ultimate reality. Few indeed outside of scholastic philosophy (so far as I am aware) will admit to the field of reality any such *forma separata* as a bodiless mind, or a force that is not itself in space and time. Even Leibniz, objective spiritualist that he was, declared that there is no mind without a body of its own, however imperceptible to human senses. And what does it avail Leibniz after all, that he defines body as a spiritual substance (a group of naked monads), when just that particular kind of spiritual substance must accompany all the higher spirits except God? A spirit that is always in matter, that is evolved out of matter (in a quite unintelligible way), and is always obedient to the laws of matter, is not a true subject in itself; it is a predicate of matter. No, I can find in present-day non-scholastic philosophy (with the single exception perhaps of Professor Lutoslawski) none who admit a genuinely immaterial reality. Body in space and time, however redefined as sense-datum or universal or psychic being, is taken as primary; other reality hangs upon it. In this sense all are practically dogmatic materialists. To find a case of anything else we shall have to look to the opinions of common sense, of traditional Christianity, or of the spiritists in the Society for Psychical Research.

It is not necessary to assign exactly the source of this curious prepossession. Let the future historian of philosophy determine why a bias so natural to primitive thought should persist through an age as humanistic as ours. For my part I think it is largely due to the progress of science. Science is confined to the material world; it is of great utility to our material needs. The volume of satisfactions it gives these needs, the number of material facts it has unearthed, is so overwhelming that we have no courage left to ask if there may be another world not open to our present methods of measurement. But whether this is the reason or not, my present purpose is to challenge the dogma. I can find no ground for the assumption that bodies have *prima facie* any greater claim to reality than anything else. I do not see why we should not in our quest for reality start from disembodied minds or pure possibilities or indeed almost anything. I do not see why, for instance, telepathy is considered *prima facie* unlikely — something to be doubted until proof is incontrovertible — as if the conditions of physical being must govern all kinds of being. In this paper, however, I shall not argue directly for disembodied minds, but rather for disembodied objects. So far from body in space and time being the reality most certain of all (I shall claim) even the material world itself, rightly understood, is an assemblage of objects that cannot be considered material in the accepted sense of that term; for these objects are not truly subject to certain necessary limitations of space and time. The world of body, so far from being that fundamental reality which it is now accredited as being, is a pinched and distorted section, a cut from the immaterial whose reality is so curtailed in the cutting that we could almost call the physical world unreal.

While this thesis has no particular novelty it must be distinguished from certain views advocated in the past. It is not exactly the doctrine traditionally ascribed to Plato. The physical world is not in my interpretation a copy, or even a mutilated copy, of a world of types or universals. No such duality as that is here defended. Rather, I think, is the real disembodied world identically this material world; the material world being as it were an assemblage of pieces pinched out and in the pinching crumpled and hampered so that they reveal the true character of the real only very inadequately. Reality in its material guise is curtailed and to a great degree shorn of its powers. Nor do I mean that the crumpling and curtailing are due to a humanly necessary form of perception in the Kantian sense. Space, time, and the physical categories are not in my view subjective forms; they do indeed largely falsify reality, but the falsification is not inevitable to our faculties, and things in themselves are quite knowable. Nor again do I defend a quite Leibnizian monadology. Without questioning the general truth of such a monadology, I do not admit the ubiquity of that well-founded delusion which Leibniz called body in space; I think that there are a plenty of real objects that have no connection with body or space. Still less is my thesis the idealistic one that all reality is only object for mind. That may be true, but it has no bearing now. The unreality, so to speak, of physical things is not due to their abstractness or contradictoriness or inability to be apart from mind.

Real objects, then, I shall claim, are by no means all mental. Some indeed are minds, but many are not so. These latter comprise the individuated forces or substances that are revealed to us human beings in the cramped way called space and time; they comprise also universals or types, such as Plato designated, relations, possible fancied objects, so-called impossible objects, such as round squares — everything that you or I can think of and a great deal more. In short the real world is indefinitely greater and richer than we with our materializing habit think. That habit is but a provincialism, a judgment of reality restricted by the narrow outlook of the human eye and hand. But the human mind, with all its limitations, is capable of better things. And if it seems that I have reacted too far against this provincialism and made reality so all-inclusive as to allow no status whatever to unreal things — errors — let me say that in this view errors (objects of erroneous belief) are real, and absolutely real, so long as they maintain themselves before contemplation. The only reason why we call them errors is that sooner or later they appear before our awareness as annulling themselves — as not self-maintaining presentations. Many of our supposed phantasies — the Isles of the Blest, the infinite and infinitesimal, the imaginary roots of an equation, the characters in a novel, etc. — may be in the end self-maintaining; we do not know in advance of experience. But let us not dwell upon the rather uninteresting question of the status of errors, but pass to the important one of the real monads that form the tissue of the material world.

What we call material being, viz., bodies in space and time, is now generally considered to be essentially active. This is perhaps one of the most fertile results of the electrical theory of matter; although it is somewhat misleading, for it has led some to declare that matter has no substance and that there is no solid stuff. But if it is quite true that, as Leibniz would have said, matter is force, it by no means follows that matter has no solid content. However, the considerations which follow are drawn from the force rather than the substance of matter. According to the modern view the activity of bodies is shown in electrical action and in impact. By electrical action I mean the attraction and repulsion of electron and proton, magnetism, radiation, and gravitation, if that is a specific force. All such action is or involves action at a distance; it may or may not travel with a finite velocity like that of light. In any case there is some sort of influence which connects two or more atoms or bodies remote from one another in space and which is not due, so far as we know, to anything like impact or actual contact of bodies.

There seem, then, to be ultimately two kinds of causal action in inorganic nature: impact, — action due to one body's pushing another out of place by itself occupying or tending to occupy that place, — and action of one body on another with no identity of place between them. The former kind, impact, depends at least in part upon the condition that two bodies cannot occupy the same place at the same time; and it seems to imply that body is thoroughly spatial and temporal, so to speak. The latter kind does not depend on the condition that two bodies cannot occupy the same space. It may involve time if it travels with finite velocity, but it makes no use whatever, I think, of the postulate of mutual exclusion between bodies. In fact, as I shall soon argue, it contradicts that postulate, because it implies that a body is present in many places at once and thus is inconsistent with the reality of space. Of course it has been suggested that there is an ether which serves as a medium of communication of force between distant bodies. I do not think it is necessary to deny such an ether. I would only point out that ether is a name for the fact that a body can influence another body without touching that body; that if ether is a sort of finer matter (as it well may be) it is a matter which is not wholly subject to the conditions of space. It is a term which signifies our acceptance of action at a distance; and our thinking will be clearer if it is replaced by the phrase, action at a distance. Nor does it make any logical difference that this action travels with a definite velocity. If it has taken five seconds for attraction or repulsion or radiation to pass from body A to the distant body B, then at the end of the five seconds, when that influence is actually affecting B, there is a dynamic connection between A and B which reaches across empty space and quite annuls the separation between them. It makes no difference to the actuality of that connection, that it occurs in a time-series. And I might add that in any case gravitation seems to be instantaneous.

Electrical action in fact is a peculiar thing, and the modern acceptance of it marks in a way the liberation of our thought from a traditional subserviency to space. Though defined in the first place in terms of space, time, and mass, electrical action has much less to do with these than impact-action, which has so long controlled scientific thinking as a kind of idol of causation. Something very like electrical action, indeed, might apply to a quite immaterial world — to a world of minds, for instance. Two minds might influence each other in a way much like the electrical way. Each might influence the other to become more like the influencer — or to become less like the influencer. If mind *A* and mind *B* possessed certain attributes respectively that were in contrast and together made up a good working social unit, the two minds might tend strongly to contemplate and enjoy each other, to perform common tasks together — in short to fuse into one. This is analogous to the attraction of electron to proton. On the other hand, the two minds *A* and *B* might possess respectively qualities *C* and *D* which are so similar that the minds could not work together as one without waste of energy — more of one quality being provided than is necessary. In this case there might be a tendency for the two to resist fusion and to seek different fields of activity; and we have the analogue of like atoms repelling each other. How far the analogy might be carried I do not know; the significant thing is that space is not so very necessary to the definition of action by attraction or repulsion. These may be defined in terms of likeness or unlikeness and of tendency to become more or less unlike. In fact spatial motion is only the becoming more or less like or unlike of two or more bodies, in regard to position. In contrast with this semi-spatial or well-nigh non-spatial world of modern theory, the older world of corpuscles acting on one another in the last analysis only by impact, was a world in which space was of absolute importance; for two bodies could be dynamically connected only in so far as their edges occupied the same place. And if much of our philosophic thinking today still enthrones space in its purview of the world, it has failed to recognize the change which has come over scientific theory — a change of whose significance perhaps the scientists are not wholly aware.

But I think we should go further than this. As I suggested above, the world of attraction and repulsion is not merely less spatialized than the old corpuscular world of mechanics; it denies the reality of space, and thereby implies that the so-called material world is a world of force-substances that should not be called material in the usual meaning of that term. Action at a distance is inconsistent with the reality of space.

The reason why scientists have been unwilling to accept *actio in distans* is, I suppose, that it breaks the continuity between cause and effect. Now there would be no break unless spatial separation were understood to mean real separation, essential sundering of connection. Once let that understanding be removed, and there is no objection whatever to *actio in distans*. But that understanding rests upon the spatial axiom of the mutual exclusiveness of places, from which the inference is made that *bodies* are mutually exclusive; that two or more bodies cannot be in one place and one body can not be in two or more places. While this may be true of places, there is no logical warrant for extending the axiom to bodies. Bodies are not only pieces of space; they are also active forces. There is no ground for the belief that what applies to the spatial properties of body must apply to the body as a system of forces. And we know by actual observation, by the electrical theory of matter, that the forces which constitute a body are not confined to its volume. Hence we must conclude that the axiom of mutual exclusiveness, which is true of space, is false if applied to bodies. If (as we have learned) a body is essentially an attracting and repelling substance, must we not declare that every body, however small or great, from proton to largest star, is everywhere at once and thus denies the reality of spatial separation?

All this holds of electrical action; but we have not yet examined impact, which after all might seem to be admitted as a fact even in the electrical theory. Do we not hear of collisions of molecules in a gas, or of electrons in a current, and so on? How then can we say that bodies are not mutually exclusive?

Now as a matter of fact it is doubtful that contact ever occurs. There is approximation, certainly, of bodies, of atoms, of electrons and protons; there is subsequent separation. Is there any well-attested case of touching? I have never heard of one. Approach and recoil without touching are sufficient for our scientific calculation. There is, I think, no empirical proof that two bodies approach, touch, and recede; still less that they recede after touching because the bodies as it were resent the intrusion of one another into their own sacred volumes. All we can be sure of is that as two bodies draw nearer to each other a certain repulsive force, whose nature we do not understand, appears and becomes a maximum, after which the bodies draw apart. We cannot say that it is truly a fact of observation, that two bodies cannot occupy the same space. They may never have got close enough to try. On the other hand, it might be that were two bodies to approach each other with a certain very great force, this repulsion would be overcome, and the bodies might touch and then fuse. There might be a critical point beyond which recoil would not vary with the impact. All we can say at present is that there is no evidence which tells against the possibility of fusion. The assumption that two bodies cannot occupy the same place seems to be a generalization which could not be supported by observation. And how in any case could contact be observed? Who could see that the space between two bodies was nil? Who can see the continuity of space? The assumption is a dogma carried over from the field of positions to the field of bodies; a transition for which there is no logical justification, if bodies are more than volumes.

The fact probably is that the repulsion between bodies in collision is action at a distance, however small that distance may be; and if so, we are in a world where the refusal of two bodies to occupy the same space — if such refusal there be — is not a case of exclusive space-occupation at all, but a case of re-direction of motion. Elasticity is almost certainly residual electrical force, and not a mysterious property of a corpuscular mechanical world. And I would suggest that the problem of ultimate differences of density seems less of a knot if these considerations are true. The proton, for instance, which has a mass about 1800 times as great as that of the electron and a smaller volume, may be an example of more matter fused together than is the case in the electron.

Action by impact, then, does not seem to prove that the spatial axiom of mutual exclusiveness applies to bodies. We do not know that two bodies cannot occupy the same place. On the other hand we do know that one body does occupy many places at once, in so far as it is an electric charge. And this is enough to deny the actuality of spatial separation.

But I shall be told that contrary to what I have said the reality of space is directly implied in the inverse-square law, which is fundamental in physics. Attraction and repulsion may deny the reality of distance, but they vary according to distance; the world of bodies, then, does so far have a truly spatial character. But let us see what the inverse-square law means.

Why should an attractive force exerted by a proton A upon an electron B grow less as B is more remote? The force extends in a straight line (we may suppose) out from A to B; A and B do not in any way change their nature as they move apart — no difference supervenes but bare distance. Of course we *think* we explain the inverse-square phenomenon when we draw a pencil of rays from A through and beside B and show that the area intercepted by B

receives fewer and fewer of these spreading rays — in proportion to the square of its distance from *A*. But this only puts the difficulty one step further back. Why should the rays spread out in a pencil and so lose their intensity for a given retreating area? After all, space is but a name for the fact that they do so.

Distance, expressed in physical terms, means lessening of force; dividing a force up into smaller bits more widely distributed. This is a quite negative description, and just so far is space a negative affair. The same characteristic of distance appears in the fact that a body is sensed as smaller when it is more remote. This is also negative; it whittles down the size of the body, and is, indeed, a false datum. To be sure we become adjusted to this false datum in early childhood, so that it soon ceases to deceive us; but that does not decrease the illusoriness of the sense-datum. Not, of course, that this is due to our senses — as the ancients thought — it is due rather to the nature of space.

Space which is the assemblage of distances is thus in effect a splitting up of the force that resides in each electron or other ultimate body. If there were no such space and we could see the whole of the force in one body concentrated on another body, then that force would appear as it really is, in the body, far more intense than it now seems. The material world is in fact the theatre of forces much more powerful than we actually witness. These forces are split up and lessened (we call the lessening by the name of space) and we have commonly no fit appreciation of their intensity — though the scientists have, indeed, told us thereof. This almost incredibly energetic environment — how different it is from the world portrayed in terms of space and time, where the terrific intensities of Nature are shivered into the minutest fragments, tempered to our faculties as the sun's light is tempered to the retina.

I shall be told, however, that the splitting up is quite real and, therefore, the material world in space is quite real. And I do not deny that the splitting occurs; for blindness is as real as vision. But the information conveyed in blindness is not positive; and the information conveyed by the space-world to our senses and to our intellect is not positive. It shows us the forces by which we are surrounded in pinched-off bits; the resulting picture is no more adequate to the fact than a gently falling snowflake is adequate to express the gravitative power of the earth.

But it is not merely that space gives a poor and cramped view of reality; that view is directly denied by action at a distance. If distance were real, no body could act on another remote from it.

We have to infer that distance is not real, and that space as the assemblage of distances is not real. The material universe is a collection of force-substances that are distinct and individuated, but they are not separated from one another in the spatial manner, as we commonly believe. They are split up and weakened in their effects upon one another; that is all the reality there is in this phenomenon of space. Space is as it were a distorting lens thrust before our eyes (though, of course, not subjective in any way). Incidentally we may ask: If space is so unreal, why should it have any effect on minds, and why should not one mind affect another regardless of proximity or material contact? In truth the monad which acts here acts there, and the force exhibited at a great distance is identical with the force exhibited at the centre; but the mutual exclusions of space which we falsely accept obscure the identity. Thus the material world as usually portrayed is as far from being real as the distant is from the near — for each spatial remove is an obscuration of an identity. Yet what is given to the senses and to the reason of man when these are properly used, is except for spatial separation quite real. We are in daily life conversant with the real world, but it is a world of non-spatial monads. These monads act on one another, offer resistance to one another's action and to separation of their attributes. But they are not dependent on juxtaposition for their efficacy. They may well be called disembodied, since they are not truly described by the categories of matter in space. It is they that we see and hear and touch, but we fail to appreciate them adequately because we are the slaves of space.

It is in this sense that we may declare that the real world of objects that are not minds is an immaterial world; for it is a world in which the matter which is supposed to be subject to spatial attributes has no place; that spatial matter is replaced by force-substances which maintain their integrity and act upon one another as if they were not separated at all.

BUILDING THE COMMUNAL MIND

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THIS paper is an attempt to call attention to some of the less-noticed puzzles that confront us as we make our rather mild efforts to build up communal-minded creatures out of our passionately self-interested selves.

May I begin by quoting an incident from a modern novel, *The Philosopher's Stone*, by the Danish writer, Anker Larsen?

"Every time Jens was alone with Lillebror, he slipped of his own accord into that silent, most primitive part of his ego which was entirely himself. He was in the happy world of the language of heaven, and the feeling that they both knew all the things about each other which could not be put into words, did not fade.

"One summer morning they came out early, while the dew still lay on the grass and twinkled at them.

"Jens happened to look at the road and found that he was fond of it. He was fond of it in the same way that he was fond of Lillebror and he thought he could see in the road that it liked him too.

"He could feel this right into the soles of his feet, which tickled with the desire to touch the road. He pulled off his shoes and stockings.

"Lillebror, who always did the same as Jens, pulled off his too and ran on ahead across the playground.

"Jens followed him, looking at the soft prints of little naked feet; the tracks seemed to him so alive that he could not only see them but *hear* and *feel* them.

"The playground was smiling.

"Under the elder-tree by the churchyard wall stood Lillebror lost in wonder.

"Jens went over to see what there was to amuse him.

"There was nothing, but Lillebror's eyes were fathomless. Jens looked into them and saw that Lillebror *stood open.* Jens could see at the same time *what he was, and how he was aware that he was so.* The language of heaven was a bigger thing than he had known. He understood how God could be all-knowing.

"When he turned to the elder-tree, he saw that it stood open like Lillebror, and he knew that that was what the child was wondering at. He could see what the elder was, and how it was aware that it was so.

"It was as though the elder-tree breathed into him, and when the breath of the elder was in him he felt a great joy, which he knew; the joy of the language of heaven. The elder also spoke the language of heaven in its inmost being.

"There was something in him which insisted on his sitting down under it; Lillebror was already seating himself comfortably. So he knew that the elder was inviting them in.

"There were the three together, happy in that which we have no words to say. There they would sit a little while.

"They did so, and time stood still in their hearts a little while.

"But in their stomachs, which must have belonged to the closed world, time continued to move on, and by lunch time it had left distinct traces: they were very hungry.

"They got up. 'The time must have passed without our knowing it,' said Jens.

"They went across the playground, but over by Jakob Hansen's gate they were stopped by a barking and loud cries of a woman's voice.

"The yard dog had got loose and was rushing towards them. The servant girl saw it, ran into the house screaming, and called out that Hector was killing the children.

"Jakob Hansen and his men left their lunch, but dared not tackle the dog unarmed. One got a gun, another a spade, another a fork. All the time the girl was shrieking that the children must be bitten to death already; she had seen the dog rush at them, but dared not go to their help, for Hector was savage as a wolf.

"It made a dash for the boys just as they had left the elder. In spite of their hunger they had not quite come back to the closed world, where we reflect and understand what danger is.

"When Jens saw the dog come rushing at them with bristling coat and bared teeth, it did not occur to him that it meant him any harm. He simply saw that the dog *stood open*. He saw what Hector was, and how he was aware that he was so. 'You're a good watch dog,' he said. 'Nobody can get past you when you are loose in the yard.'

"And he put out his hand and patted him.

"When Jakob Hansen and his men arrived with their weapons, the dog was quietly allowing himself to be patted by both the boys. Jakob wiped the sweat from his forehead before he recovered himself sufficiently to go and take Hector by the collar.

"'I can't make it out,' he said; 'it's a miracle he didn't bite them to pieces.'

"But the girl, who had come up in the rear of them, understood. Now she had seen what a power there was in innocence, she said, and she was converted from that hour.

"She wanted conversion too, for it was a long time since she had been innocent."

All this, of course, sounds like sentimental nonsense to our ordinary robust scholars' minds — and perhaps it is. But then, if Jens is right, we ourselves, in our everyday life, perhaps even in our proudly intellectual life, are living in a considerably "closed world." Things and creatures do not "stand open" to us. We speak a slow word-by-word language to each other, laboring through time to express what is really instantaneous; we clumsily walk our one-step-after-the-other, laboring through space to reach what is already there; we stand outside each other, regarding each other as "other" individuals.

Few, even of the keenest among us, are accustomed to think of such habits of mind as these as defects in ourselves. We take it for granted that this way of speaking and walking and "being individuals" is the real thing, and that anything else is inconceivable and, therefore, if suggested, a good deal crazy.

It may be that most of our problems of mind and personality are unsolvable by us because we discuss them in terms of what is really our closed world. Apparently we are doing what a two-dimensional creature would be doing, if, passing around the base of a cylinder and unable to raise its vision into a third dimension, it should confidently attempt to describe the nature of the cylinder. It would, of course, describe the cylinder as a circle, or perhaps not even as a circle, and would be highly incensed if told that its mind was only doddering on the lower edges of reality. This two-dimensional creature lives in a world closed to the third dimension. Do we ourselves inhabit a world closed to other dimensions? If we do, — which is not altogether unlikely, — then the normal inadequacies of our mind — our isolations, petty independencies, intolerances, prides, and cruelties — and our anti-social nature in general, may be due simply to our inability to function in a more adequate system of dimensions.

Spinoza, as we remember, suggested that we know only two of an infinite number of attributes of infinite substance. With our eight or nine meager senses, in other words, we walk in the midst of an abysmal ignorance. We are, however, guarded against the appallingness of our ignorance by a kind of protective shell of self-sufficiency. The average mind *thinks* it knows, in kind at least, pretty much all that needs to be known. It *thinks* the spaces about it are quite as empty as they seem. It keeps its sanity and its complacence because it unhesitatingly takes the appearance to be the reality.

Kant, as we know, took us a step beyond Spinoza. Not only are we limited, but, with complete unconsciousness, we create our own limitations. Space and time are not a kind of independent outside-of-ourselves space and time, but are organic with our organisms. This is the hardest thing of all for the average mind to get hold of. I doubt whether most of us philosophers get it as more than an interesting theory — really feel it, I mean, and build up a new type of experience upon it. For if once the idea — or the feeling — gripped us fully, I suspect that most human relationships would get transformed. For example, what we call human individuality is largely a three-dimensional space affair. Thomas Jones is a person "out there"; I am a person "here." If I wish to have contact with Thomas Jones, I must cover a space that lies in between. Even if I wish only to have mental contact, I must throw something — words or signs of some sort — across an intervening space. What I am constantly aware of, in short, is the mutual outsideness of Thomas Jones and myself, and of all other individuals and myself.

Our space experience, therefore, conditions us to a sense of personal outsideness. It lays stress — perhaps a quite illusory stress — on what we call our individuality. If we group ourselves together, as in the family or the community, we are nevertheless like peas rattling in a pod. We bump ourselves together; we make agreements not to bump; or we deliberately plan prodigious bumps that will rattle each other out of existence. We look at each other from the exterior; and we are actually convinced that thus we see each other aright. "To thine own self be true," we solemnly intone, and believe that it *is* true.

All of which may be quite false if Kant is right. For if this space of ours is not independent outside space, but only a space issuing forth from our organic constitution; or even if, though real, it is only a partial space, like the two-dimensionality of the creature we have mentioned, then all this three-dimensional outsidedness out of which we carve our individualities may be something of an illusion.

The camera, as Bergson long ago showed, commits just such a distortion of the real. Here is a moving thing. The camera snaps it into an everlasting fixation. That fixated thing which we call a photograph is, of course, laughably inadequate to represent the living thing.

If the camera were alive, we should say that it had a "dot-dot-dot" — a discrete — form of experience and no experience whatever of "flow." Have we something of the camera nature in us? Do we, in like manner, fixate the flow of life into spaced-off individuals? And then, because we have spaced them off, do we begin to glare at each other and proceed to wipe each other off our spaces?

A harder thing than this is to believe that time has no fixed outside existence. We like to think that "Caesar dead and turned to clay" belonged to quite another day. And so we proceed to lose interest in Caesar and center interest in ourselves. Again a kind of fixation — this time in the "present" — *our* present. But suppose that yesterday and today are only yesterday and today from our organic point of view, that from the point of view of differently placed organisms, yesterday is today and today does not exist. Our finely sequential world of past, present, and future looks a little tipsy. Christ still lives and we ourselves are not yet born.

Or suppose that we could speed up the organic tempo of our lives. In one revolution of the earth we might live a whole lifetime. Apparently the more quickly moving creatures do it, being born in the morning and dying at night. Poor things, we say, not realizing that their time is not our time, that time is relative to organic movement, and that our twenty-four hours are no more the measure of real time (if such exists) than we are the measure of the entire universe.

Human beings, then, in truth, are special creatures under special circumstances who know themselves only from special points of view. It would seem to be quite erroneous, then, to take the normal experience of a human individual as the measure of what is fundamentally real about him. It is far more plausible to believe that the human being lives a curiously imprisoned life — imprisoned within his own peculiar space, time, and sense forms; — and that he knows almost as little about himself and his world as does the caterpillar or the fly.

FORMING THE COMMUNAL MIND

And yet it is out of these curiously imprisoned creatures that we must build our communal life. It is small wonder, then, that our chief problem is with those qualities which are the outcome and expression of our imprisoned point of view — self-absorption, intolerance, ignorance, fixed mindedness, misunderstanding, cruelty, pride-of-self. Can we find a clue to the building in ourselves of a less imprisoned life?

A few spiritual geniuses — the mystics — seem to have found their way out. They seem actually to have broken through the hard walls of our ordinary psychical life, and to have emerged into another kind of psychical life, one in which their egoistic individuality has disappeared, to reappear as an intensified cosmic individuality.

Doubtless in such mystic experience, we are at the upper limits of our human possibilities. Doubtless, too, in such experience, we have a pointing of the direction in which the evolution of the human mind and spirit will proceed. But at present that direction is no doubt reserved for the spiritual geniuses of the race. Our problem at the present moment is with the ordinary run of mankind. Can we move our average personalities even a short step in a direction which leads to a kind of breaking through the walls of our ordinary limitations?

The clue, one suspects, may be found in those experiences which tend, so to speak, to *open us out.*

Obviously, the most usual opening-out experience is that in which the mind reaches out to further knowledge. But not all such reaching-out is of equal significance. There are apparently two kinds of reaching-out to knowledge, first, the reaching-out which is appropriative; second, the reaching-out which identifies itself with that to which it reaches out. The first, which is the usual form of knowledge-getting, is really not an opening out of oneself, but rather a taking in to oneself. The knowledge is brought in, to be appropriated and used. The movement starts from the individual and returns to the individual with captured booty.

Ordinarily we make no distinction between these two kinds of knowledge-getting. All knowledge-getting is supposed to be good. But there can be misers in knowledge, one suspects, as well as misers in gold; and the resulting personality may be equally unlovely. Hence the importance of stressing the second kind of knowledge-getting, where the attempt is made *to identify-oneself-with what one comes to know.* I have in mind the self-surrender of a scientist like Fabre, who literally sinks himself into the creatures he studies; and I compare him with the usual biologist or entomologist whose approach to his living subject-matter is wholly from the outside.

I know that I am risking all my logical reputation — if I have any — in what I am here implying, but I ask myself how well we could understand a child if we did not seek in some measure to surrender our well endowed adulthood and identify ourselves with the child's own interest in life? It is a sad commentary upon the biological sciences, and latterly upon a certain type of psychology that they refuse to do this. They refuse to sink themselves in the object, to find and live in the interior of the object. Which means, of course, that such sciences, despite all of value which they contribute, remain closed to the more real aspects of what they study.

And so I come to what seems fairly central. If a person is to press beyond his limits, it apparently must be through the kind of knowledge-getting in which he actually *surrenders himself to, identifies himself with*, the object which he studies. Schools rarely train to this kind of knowledge-getting. They train chiefly the ability to accumulate facts. For this reason they may be said to accentuate the normal self-centered appropriativeness of individuals and to prevent their breaking through to a condition of real communal mindedness.

The second kind of knowledge-getting presupposes a kind of love-of-the-object. That, of course, sounds like the completest kind of nonsense. When we enter a schoolroom or a laboratory, we are supposed, upon pain of inflicting our personal equation upon a suffering world, to leave our emotional, our love-nature behind. But this may mean that our schools and laboratories admit only our part-selves — perhaps even less than that. And part-selves can hardly be expected to attain whole views.

I remember a boyhood experience. I recount it not because it was extraordinary, but because it might occur to any quite ordinary person like myself, and it suggests a point of view. I had started out to draw a tree. As I tried to set down the way the branches grew out of the trunk, and the way the leaves hung fluttering on the branches, a curious feeling began to come over me. The tree, at first, had been just something "out there," an indifferent object, not myself. But now, as I worked away with my pencil, I began curiously to *feel* the tree. It was as if I could sense the interior life of it, could feel it living and growing, could actually talk with it in a language without words. The tree suddenly was a life *in its own right*. It stood open.

The experience was strongly emotional. I can remember to this day the tides of feeling that surged in me as I walked home. I seemed to have broken into another order of life. I had not simply seen an external thing with my eyes, taken note of its contours with my pencil. I had felt and loved a life other than my own.

Despite the apparent idiocy of all that, there, perhaps, may be the clue. Knowledge that is also *love of the thing known* is really a different kind of knowledge. It is on another level. It is the kind that most learned persons do not possess, for which reason they are so often closed personalities, unsympathetic, intolerant, self-centered, even anti-social.

No doubt it is this swinging ourselves into the interiors of other existence which must serve chiefly to expand our limited selves. Human individuals have, apparently, to learn the almost completely unknown art of "*identifying themselves with.*"

We need, therefore, propose no high mystical adventure for the ordinary person. We have here a relatively simple clue. We have distinguished two kinds of knowledge-getting; the appropriative kind and the kind in which one "*identifies-oneself-with.*" We can make the same distinction in other regions of experience. In the viewing of pictures, for example, or the hearing of music, how much of the experience is purely appropriative, a kind of passive taking in of enjoyment; how much of it is an actual effort to identify ourselves with what the picture portrays or the music tells? Again, in erotic love, how much of it is a mere enjoyment of the act of loving, — a being in love with love; how much of it is an identification of ourselves with the very interior life of the other person? We have made such a god out of love that we fail to note that erotic love, even in its highly respectable forms, is for the most part grossly egoistic. Instead of opening us out, it closes us in — which accounts perfectly for the fact that erotic love, of itself, even though it forms families and induces high respectabilities, does not tend to develop the broadly communal mind.

And so we might ask the question about our so-called "love of Nature." Is that just an enjoyment, an awakening in ourselves of a pleasant feeling, a holding of these feelings deliciously to ourselves; or is it an actual *identification-of-ourselves-with* a living something far more comprehensive than ourselves?

Once this idea of "identification-with" is grasped, it tends to become central. It serves as the test by which we are enabled to distinguish experience that keeps us within our limits and experience that really opens us out. And, of course, it is obvious how the "identification-with" idea places its instant condemnation upon such an attitude as intolerance — which is never an identifying-with, but always a holding-to-oneself as sufficient; or self-pride, which separates-itself-from and holds-itself-above; or jealousy and cruelty, which seek to hurt or to obliterate the other; or self-absorption, which simply forgets that the other exists.

The communal mind cannot be built out of non-communal attitudes. Aggregating people together may simply make them rattle the more viciously against each other. Much of our so-called civilization is just an organized preying of men upon each other; or at least, at its worst, an organized way of helping each other to get self-satisfaction. The communal mind — if it is ever to be developed — is the mind that lives widely and intensely, in and through the minds that surround it. It is the mind that is constantly opening out, surrendering itself, and yet winning a more powerful selfhood through *identification-with* other life. This seems to be the central idea. It is not unlikely that it may be made the animating idea in our education and in the rest of our significant experience.

At present, education, and all the rest of our experience, accentuate the fact that "I-am-I" and "You-are-you." At best I can shake hands with you, talk with you, study with you. I can even marry you. But not even this last fatality drags me really out of myself across the dead line that separates the me from you. But might I not learn to cross that dead line? That, I think, is our major human problem. As yet that problem remains in the limbo of mystical nonsense.

IS PHILOSOPHY DOOMED?

WILL DURANT

(*Brooklyn*)

IN a recent magazine article Dr. John B. Watson remarked casually (the subject being of no importance) that philosophy is dying, and within fifty years will be dead. As a practitioner of philosophy, to whom *vivere* stands in a vital connection with *philosophari*, the present speaker wishes to offer a different diagnosis, and to suggest an operation for the rejuvenation of philosophy.

Why does Professor Watson think that philosophy is doomed? Because it is unscientific, because it makes unprovable assumptions, and because its methods are not confined to external observation, physical tests, and mathematical measurement. Having found no way of using introspection in his study of animal behavior, Dr. Watson is convinced that introspection in the study of human behavior is worthless, inaccurate, and immoral (for occasionally it lies like a statesman). Having found no way of accounting for consciousness on the assumption that all life is mechanical, Dr. Watson denies the existence of consciousness, and suggests, without a twinkle in his eye, that thinking is merely a windy process in the larynx. Having made up his larynx that this is an exclusively material world, mechanically determined in all its parts and operations, he concludes that all things are open to study by mechanical methods and instruments, that no other method can give us any valuable information, and that philosophy must take the viaticum and give up the ghost. Philosophy has existed for a little more than three thousand years (not to speak of the Aristotles of Altamira and the Cro-Magnon Croces); but now that psychology has discovered that its subject is human behavior, philosophy must die. It is a sad prospect for professors.

As the recent recipient of certain kindly remarks from Dr. Watson, the present writer feels considerably embarrassed in the operation of his *odium philosophicum*, and cannot find it in his heart to attack with a buttonless foil this murderer of metaphysics and undertaker of philosophies. Perhaps the politest way of meeting the assault is to open one's arms, surround the enemy, and welcome him as an unconscious philosopher (we have the Doctor's word for it that he has no consciousness).

A philosopher is a man who has a theory about the nature and operation of the world. He insists on filling out with unprovable assumptions the gaps in our verifiable and scientific knowledge of the universe. He makes, perilously, an imaginative and hypothetical completion of the reports brought to him by his senses and his viscera. He need not do this willingly; he may protest, like Comte, that he is a positivist, and wishes to limit himself to precise facts; or like Spencer, that he is an agnostic, and does not know the ultimate nature of things; but in the very utterance of his protests he makes unverifiable assumptions, and becomes a philosopher despite himself, *un philosophe malgré lui*. If an agnostic could live so neutrally as to conceal his secret belief or unbelief, he might achieve a moratorium on philosophy, a state of anti-philosophic coma, a cosmic unconsciousness. But even the greatest skeptic finds this impossible; he must take sides in the game and gamble of life: he may talk agnosticism or positivism, he may assure us, with transcendent clairvoyance, that certain phases of reality are unknowable, but he must none the less live *as if* he accepted one or the other horn of those awful dilemmas which constitute philosophy. He must make up his mind whether this earth is the work of a designing intelligence, or the unguided struggle of molecules and morons to avoid an inevitable death. He must make up his mind whether he is a machine cohabiting with another machine for the generation of baby machines; or, the exuberant vehicle of some *élan vital*, the possessor of a certain creative spontaneity, the transient crucible of a divine fire. He must make up his mind whether the precarious processes of reason, or the majestic immediacy of "intuition," shall be his guide to reality and his test of truth. He must make up his mind whether he shall be faithful to his wife, or undertake a more expensive distribution of his energies. He must make up his mind whether he comes to an end with his funeral, or merely enters therewith upon a loftier existence. He must make up his mind whether he has any, or has only a philosophical larynx.

These are all vital problems; and philosophy might be defined as a matter of life and death. On every one of these Dr. John Broadus Watson has made up his wind-pipe. He assumes that all forms of reality — sticks and stones, kindness and prayers — are subject to physical measurement; it is a magnificent assumption, quite beyond verification, and constitutes him a philosopher. He assumes that materialism is correct, and announces his *philosophy* with laudable simplicity. He assumes that the world is a mechanism, and that he is a machine mechanically and unconsciously meditating upon the superfluous evolution of consciousness in the machine; that is, he has a theory about the world which is as yet unprovable, and which merits the name of philosophy given to the theory when we find it in Democritus or Lucretius, in Hobbes or La Mettrie. He assumes, of course with scientific proof, that there is no spontaneity in life, that every action of every being, and every note in the Choral Symphony, was determined and written out indelibly by that famous primeval nebula which has taken the place of the Garden of Eden in the mythology of science. He assumes that mind is matter, and that God is dead.

Now these are all possible and consistent assumptions. Every philosopher — and no scientist — has a right to make them, or their opposites. We have to make them, or their opposites; and in doing so we soar beyond all scientific proof that we are wrong, or right. Life demands that we make assumptions about the nature of things and the destiny of man. *Non fingo hypotheses* is the fit motto of a corpse, and an immodest remark on the part of a Newton who makes a flying hypothetical leap from his orchard to the moon. We shall always make hypotheses, and the lure of the absolute will draw us ever on. That is why (among many reasons) philosophy is more interesting than science; it is an adventure into the unknown, a tour of the infinite; by the side of this exciting voyage of discovery science is as alluring as the multiplication-table, or double-entry bookkeeping.

We are all metaphysicians then; we go bravely beyond the limits to which our bewildered physics can reach; and the only difference between a confessed metaphysician and a professed positivist is that the former (in this regard) is an honest man. Dr. Watson must bear with us patiently if we call him a philosopher. His larynx is choked full with marvelous hypotheses about the universe; he is a self-suppressed metaphysician; and the best thing we can do for him is to remove his agnostic phobias, reveal to him his "subconscious" assumptions, and psychoanalyze him into a healthy and fearless philosopher.

Having made this *argumentum ad hominem* (which can be directed against every positivist), let us face honestly the difficulties which turn realistic minds away from philosophy. A hasty glance at the history of speculation tempts the lazy soul to conclude that every philosopher contradicts every other, with a final result of zero.

> Myself when young did eagerly frequent
> Doctor and saint, and heard great argument
> About it and about; but evermore
> Came out by the same door wherein I went.

Now this famous quatrain, like most things beautiful, is false; we do not come out by the same door wherein we enter, unless we have left our brains outside. A man cannot make even a half-adequate study of the great philosophers without changing his mind on a hundred vital points. Such a man will change his mind even about the contradictions of the philosophers; for he will discover that on nearly all of the fundamental problems nearly all of the philosophers agree; their differences being due rather to the terminology of their time than to the hostility of their thoughts. If such a man is also a student of the history of science he will discover that it is in science, much more than in philosophy, that theories and unchangeable dogmas kaleidoscopically change. Fifty years ago our cosmic history began with the Nebular Hypothesis of Laplace; now it begins with the planetesimals of Mr. Chamberlain (or has that fashion altered too?). Fifty years ago the *Origin of Species* was the Bible of biology; now none so poor to do it reverence. Evolution by continuous variations was displaced by the improved and accelerated method of mutations; mutations were found to be the illegitimate offspring of hybrids; and now we are groping back with Mr. Kammerer towards le Chevalier de Lamarck and the neck of the giraffe. Newton established certain laws of motion, and Einstein has dethroned them. Mayer and Joule and Rumford and Davy and a hundred others proved the indestructibility of matter and the conservation of energy; and Messrs. Soddy and Rutherford and L. Poincaré begin to cast slurs upon these ultimate dogmas of modern science. Another Poincaré tells us in French, and Mr. Pearson tells us in English, and Herr Mach tells us in German, that the "exact" knowledge of science is merely a shorthand description of approximate probabilities, and the eternal and immutable laws of nature are only the statistical averages of the observed habits of matter. (What shall we do with a science that has become as uncertain as philosophy, and with a nature whose laws are as reliable as statistics?) Mathematics was once a system of rigidly exact and infallible truths; suddenly the dimensions began to breed, the infinites began to include one another, the part became as great as the whole, and Einstein demonstrated that a straight line is the longest distance between two points. Francis Galton and Karl Pearson complained that we had "put our money" on Environment, when Heredity wins in a canter; Mr. Wiggam announced this brilliantly to the world; and now Dr. John B. Watson informs us, after hatching two hundred babies, that the environment of the embryo and the child is the chief factor in determining character and history, and that heredity is a minor item, with a negligible influence. Every good historian proves that history is "a Mississippi of falsehoods"; every good Egyptologist has a new ladder of dynasties and dates, differing from the others only by a few thousand years; and every good anthropologist laughs at Tyler. The scientific experimental laboratory psychology of Messrs. Wundt, Külpe, Ebbinghaus, Cattell, and Stanley Hall is cast into the cemetery of dead infallibilities; and we must learn the same things all over again in brand-new terms of conditional reflexes and vocal cords. Dr. Watson does his best to be polite to these antediluvians; but he cannot write a page of the latest and only scientific psychology without scattering the entrails of his predecessors to all the constellations of the zodiac. It is a merry circus for a philosopher.

Having pointed out this beam in the enemy's eye, we can afford now to admit a mote or two in our own. Yes, philosophy is obscure; but so is Shelley, so is science, so is woman; so is anything interesting. Worse, philosophy is sometimes dishonest; we dress up the beloved prejudices of our hearts, or the theology of our aunts, in the garb of a sternly objective Reason. "Metaphysics," says Bradley, "is the finding of bad reasons for what we believe upon instinct; but to find those reasons is no less an instinct." Sometimes it is the finding of bad reasons for what we should like our neighbors to believe. It is hard to tell whether some philosophers have been simpletons or diplomats. The mechanist seldom behaves as if he thinks he is a machine; as Bergson showed, he laughs when he catches himself behaving like one; and only by a certain self-deception can he cling to this theory. The idealist seldom behaves as if he thinks that his room ceases to exist when he leaves it, or that he himself ceases to exist when he lies asleep, unperceived by any mind. Undoubtedly some of the obscurity of philosophy is due to the lies it has told. Truth is clearer than fiction.

Half the charges against philosophy are due to its modern preoccupation with the problem of knowledge. In the effort to refute materialism the philosophers, who were only half-secularized theologians, resorted to a wild attempt to reduce matter to mind; from the simple proposition that we perceive matter only when we perceive it, they concluded stealthily that it exists only when it is perceived. Any attack on this German fairy philosophy, and any rescue party formed to recapture philosophy from the caves and bogs of epistemology, will have the blessing and imprimatur of all real lovers of the "dear delight." As Whitman said to Traubel: "When you hit a landlord and I don't say 'Amen' it's because I didn't see you." If some clever surgeon can remove the diseased epistemological appendix from philosophy, and turn it over to the behaviorists as properly belonging to psychology, the situation will be improved on every side.

But after all, what is the use of philosophy? A shameful question to ask: you do not ask it of poetry, which is also an imaginative construction of a world incompletely known. In a strictly American sense, philosophy is useless; it will not swell your income, or help you to trade horses, or guide you in your selections at Saratoga or on the Exchange. It may even make you a little careless and unambitious about these things. But what if, after winning at Saratoga, or in Wall Street, or in Washington, you find yourself ignorantly naïve, coarsely unfurnished in the head, brutal in behavior, chaotic in desire, unstable in character, and blindly miserable?

Well, philosophy should give you, first, unity of mind. We are all so slovenly and self-contradictory in our thinking; we need a little coherence and consistency; let us pull ourselves together and rise to that *total perspective* which is philosophy, — and then through unity of mind should come unified desire, and through this that unity of character which is personality, and through this that unity of life which is the secret of such modest happiness as humanity can maintain. *Philosophy might be defined as unified knowledge unifying life;* it is not philosophy if it is knowledge alone, scholastically insulated from affairs. A philosopher is a man who remakes himself towards his great desire; he achieves that self-discipline without which we are inevitably the slaves of other men.

But finally, philosophy is not merely a study of systems, it is an ennobling intimacy with great men. It is one of those winding and hilly roads which lead to that Eden in which geniuses never die and wisdom makes with beauty the "highest music." That Country of the Mind where Socrates and Plato and Epicurus, Raphael and Leonardo and Angelo, Bach and Beethoven and Wagner, Goethe and Shelley and Keats, await us with a grateful welcome, glad to speak to us as long as we will listen, and careful to give us only of their best. In this City of God inexhaustible treasures lie open to our hands; we need only seek and we shall find. We cannot live long in that air without becoming, despite ourselves, a little finer through the company we keep. Perhaps if we lift ourselves to those clear heights we too shall some day be keen enough of eye to see new truth and beauty in the world and skilled enough in speech to reveal it to men. Let us climb. Perhaps we shall find Dr. Watson then among the philosophers.

SECTION 4

Time: Friday, September 17, 9.30 A.M.
Place: Standish Hall Common Room
Subject: Open Session
Chairmen: Alfred H. Lloyd, Michigan
John E. Boodin, Carleton

PERSONALISM AND THE INFLUENCE OF BOWNE

Edgar Sheffield Brightman
(*Boston University*)

THE purpose of this paper is to define personalism with special reference to the thought of Borden Parker Bowne.

Personalism is a recent name for what, in various forms, has in the past been called monadology, spiritualism, neo-criticism, and personal or teleological idealism. It is the theory that to be is to be a self or a member of a self. Personalism may be singularistic or pluralistic, theistic or non-theistic. This paper deals chiefly with a theistic and pluralistic type of personalism.

By self personalism means a unitary, self-identifying, conscious agent. When the agent is regarded as a substance distinct from its experiences, the self is identified with the transcendent soul. But when it is regarded as consciousness itself, — identical, organic, individual, — the transcendent soul is abandoned for the self of self psychology. A self capable of the realization of values may be called a person. A personalist may recognize a hierarchy (as did Leibniz) of personal and sub-personal selves.

Personalism agrees in several respects with other forms of idealism. All idealism views synopsis as the ultimate form of intelligibility. A person cannot be understood as a mere synthesis of parts revealed by analysis. Rather, those parts can be understood only when interpreted through their membership in the whole person to which they belong. Further, all idealism holds that reality is rational and hence in some way an organic whole. Even pluralistic personalism does not regard the cosmos as a mechanical aggregate of externally related parts, but it sees the nature of the whole mirrored in the internal structure of the individuals within it. Again, personalism agrees with most idealism in giving values an ontological status and in holding that, for the final synopsis of thought, all reality must be viewed as conscious experience.

But idealists differ about the status of persons in reality. Many assign them a subordinate place and describe the cosmic order in impersonal, if ideal, terms. Thus, the nature of the whole is said to be idea, moral order, consciousness in general, the unconscious, experience, individuality, or the super-personal. Such language usually means to deny that reality is personal, although the meaning is often vague. Personalists, however, think of concrete reality always as self or person. Impersonal idealists explain personality in terms of categories; personalists explain categories in terms of personality.

Personalism, then, is idealism, but idealism of an empirical cast. Bowne has called it transcendental empiricism. In common with all empiricism, personalism emphasizes particular, concrete experiences; is suspicious of abstractions; and is, in a sense, realistic. Personalism is radically empirical in building (as against sensationalism and behaviorism) on the experienced fact that every item of experience belongs to a self, as was forcefully stated in the paper by Miss M. W. Calkins on "An Essential Factor in Every Truly Radical Empiricism" which was read before the Eastern Division of the American Philosophical Association at its 1923 meeting. Personalism is realistic in its epistemology in so far as it holds that idea and object are forever two. Without this epistemological dualism, self would be merged in its world and a true plurality of selves would be impossible.

The sources of personalism are in the main stream of the history of philosophy, — in Plato, Aristotle, Augustine, Berkeley, Leibniz, Kant (who probably was, at heart, a Leibnizian), post-Kantian idealists and particularly Lotze, French spiritualists, and Renouvier. But the word personalism is recent. Its earliest use as a *terminus technicus* appears to have been by Schleiermacher,[1] while John Grote introduced the word into English, in his *Exploratio Philosophica*. It is found in many recent writers, such as Caldecott (1901), W. James (1902), C. Renouvier (1903), Hans Dreyer (1905), L. William Stern (1906), M. W. Calkins (1907), Borden Parker Bowne (1908), and many others. The term is now incorporated into general philosophical usage.

Borden Parker Bowne made an original synthesis of the contributions to personalistic thought made by Berkeley, Kant, and Lotze,— with perhaps more of Lotze than of the others, yet more personalistic and pluralistic than Lotze. In Bowne we find a typical personalist.

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[1] Pp. 256 f. of the first edition of the *Reden*.

Bowne was born in 1847. After graduation from New York University and a period of foreign study, he returned to America. In 1876 he became professor of philosophy in Boston University, where he remained until his death in 1910. His chief works are: *The Principles of Ethics*, *The Theory of Thought and Knowledge*, *Metaphysics*, *Theism*, *Personalism*, and *Kant and Spencer*.

Some of Bowne's characteristic ideas will throw light on personalism. With most idealists Bowne taught that the self is the datum for all thought. "Self-consciousness rests on an immediate experience of self." It may be remarked that much misunderstanding of personalism rests on a confusion of self-consciousness with self-experience. All experience is not self-consciousness, but all experience is self-experience. The self is "the personal beginning of all speculation." All theory is an interpretation of this concrete datum. Sensations, physical things, universals, and values are abstract and secondary; they are relative to self, the primary datum.

Further, under the influence of Kant, Bowne regarded all knowledge as mental activity. "The constitutive action of thought penetrates even into sensation as an articulate experience. . . . The mind fixes the dissolving impression into a single and abiding meaning." An order beyond ourselves can become an object for us only by our "constructing it in thought and thus making it our object." The immanent principles by which experience is built up are the categories.

Bowne divides the categories into phenomenal and metaphysical. The former are space, time, motion, quantity, and number. Necessity and possibility are doubtful categories. The phenomenal categories contain the bases of mechanical science, but they set objects apart from each other without internal connection and hence furnish no metaphysical explanation. The problem of philosophy takes the form: Are there metaphysical categories? Bowne rejected the view that there are unknowable *Dinge an sich* and adopted the Hegelian doctrine that the real is rational. Being, quality, identity, causality, and purpose he regarded as metaphysical categories. They cannot be presented in sense. By them the mind transforms fleeting impressions into an abiding and internally connected order of objects. The metaphysical categories, however, have both a phenomenal and a metaphysical use. Metaphysically, causality is the self-determination of a free agent; phenomenally, the determination of consequent by antecedent, mere regularity of sequence. Science, then, is positivistic, restricted to the phenomenal. If phenomenal categories gave the final truth about reality, metaphysics would be mechanistic. But thought seeks internal connection, "a rational whole," which is attained only through purpose, the highest metaphysical category. Since he holds that the objects of science are not metaphysically real, his view is phenomenalistic immaterialism. But it is also a metaphysical personalism, eventuating in theism, for a Supreme Person is the ground both of the system of nature and of the society of persons.

Bowne's empirical bent was apparent in his nominalism. He held that universals have no meaning apart from particulars. Laws are nothing, do nothing. They are but names for the ways in which particulars act. Hence he attacked the fallacies of "the abstract" and "the universal," as he called them, of which he held Spinoza, Spencer, and even Hegel to be victims. It is doubtful whether he was right about Hegel.

Bowne was also a voluntarist, although the willing person and no impersonal will was his ultimate unit. His voluntarism is manifest in his teleology, based on the category of purpose; his activism, holding that to be is to act and to act is to will; and his belief in freedom. The doctrine of the speculative necessity of freedom is one of his most characteristic contributions. Science, and all knowledge, are achievements of freedom. Truth may be true if I am not free; but unless I am free I can never elect to judge it by a valid ideal. The thinker must be free to control his thinking by the laws of rationality. Unless he is free to ratify and apply those laws, all opinions are equally necessary and skepticism results. Freedom is a necessary presupposition of any valid thinking.

The natural tendency of Bowne's mind made him one of the forerunners of the recent development of axiology. He did not formulate his ideas fully, but he spoke of the fact that thought must be guided not alone by the cognitive ideal, but also by the moral, the aesthetic, and the religious ideals. He adumbrated a general theory of value, and worked out a theory of moral value in his *Principles of Ethics.*

Bowne's influence, which we have now to consider, is difficult to determine objectively. There is great difference of opinion about his importance.

Of his hold upon his students at Boston University there can be no doubt. Every student in the College was required to study under Bowne; and substantially every student in the School of Theology elected to do so. From 1888 to 1910, he was Dean of the Graduate School and a good proportion of the advanced degrees conferred by the University were for work done in philosophy under him. His reputation drew students to Boston from all parts of this country and from foreign lands. Many of them later became university teachers of philosophy or allied subjects. Among these, now on the faculty of Boston University, are Dean W. M. Warren of the College of Liberal Arts, Dean A. C. Knudson of the School of Theology, Professors G. C. Cell, F. L. Strickland, and others. In other institutions are such former students of Bowne as Professors G. A. Coe (Teachers College), G. A. Wilson (Syracuse), R. T. Flewelling (University of Southern California), H. A. Youtz (Oberlin Graduate School of Theology), L. R. Eckardt (De Pauw), H. C. Sanborn (Vanderbilt), I. R. Beiler (Allegheny), and many others. Several are college and university presidents, including President Daniel L. Marsh of Boston University. The distinguished theologian, Henry C. Sheldon, was a colleague of Bowne's and learned much from him. His entire conception of systematic theology was based on Bowne's personalism.

Bowne exerted a profound influence on leaders of religious thought. He played a large part in keeping his denomination from yielding either to fundamentalism or to positivistic humanism. But his ideas made themselves felt far beyond his denomination among men of all creeds. The religious leadership of the past two generations owes much to him. Eminent clergymen and scholars like Bishop Randolph S. Foster, Bishop Francis J. McConnell, Lynn Harold Hough, S. Parkes Cadman, Charles E. Jefferson, Harry Emerson Fosdick, Dean Charles R. Brown, J. W. Buckham, J. H. Snowden, and many others, acknowledge their indebtedness to Bowne. His chief contributions to religious thought were his theistic interpretation of evolution in the light of the immanence of God, his emphasis on social ethics, and his fight for intellectual freedom in religion.

Bowne's influence on technical philosophers has been less evident. Nevertheless his books have been widely read and reviewed; some of his works were translated into Japanese and Spanish; he was called to Johns Hopkins, Yale, and Chicago, but declined; he was chairman of the Department of Philosophy at the St. Louis Congress of Arts and Sciences (1904); he gave the Deems Lectures at New York University and the N. W. Harris Lectures at Northwestern. William James spoke of some of his books as "wonderfully able." Eucken called him "distinctly America's first philosopher." J. Cook Wilson described him as the "most important of modern American philosophers." The founding by R. T. Flewelling of *The Personalist*, a quarterly review, in 1920, was a notable sign of Bowne's influence. So too was the Bowne memorial volume edited by E. C. Wilm with the title, *Studies in Philosophy and Theology*

(1922); and also the Bowne number of the *Methodist Review* (May-June, 1922). In recent works of reference (the Hastings *Encyclopaedia*, and the Mathews and Smith *Dictionary*), histories of philosophy (the new Weber-Perry and the fifth edition of M. W. Calkins, *The Persistent Problems of Philosophy*), and introductions (Leighton, Conger, Patrick, Brightman), Bowne is being more explicitly recognized than heretofore. The forthcoming volume of Ueberweg's standard *Grundriss* for the Nineteenth Century outside Germany will do Bowne ampler justice than previous editions have done him.

Yet most histories of philosophy treat him casually. Woodbridge Riley omits him entirely from his *American Thought*, while including many less significant thinkers; A. K. Rogers in *English and American Philosophy since 1800* barely alludes to him. He is but seldom quoted in philosophical discussions or monographs.

The limitation of his influence may be traced to various causes. Bowne's charming and modest personality helped win most of his students to his vision of truth. But in his writings he appeared to be severe, sarcastic, even impatient of opposing views. This repelled many readers. Further, he was ignored by his professional colleagues for the very human reason that, to a large extent, he ignored them. It is true that he counted among his friends and correspondents such men as Lotze, Ulrici, Eucken, Bergson, George Herbert Palmer, William James, Noah Porter, George H. Duncan, William Fairfield Warren, and numerous other distinguished scholars. Yet on the whole the statement made must stand. He rarely quoted other authors, and then mostly for polemic purposes. He did not join the American Philosophical Association. He did not contribute to the philosophical journals. His writings, moreover, had a pedagogical rather than a technical cast. He wrote textbooks or popularizations chiefly, rather than monographs. Thus he widened, rather than deepened, his influence. Further, his religious environment and nature led him to be fundamentally an apologist. His scientific training was largely in mathematics and physics rather than biology, — and that in a period when biology was in the center of scientific and philosophical interest. His appeal to life as more than logic also somewhat restricted his influence among persons of a non-pragmatic type, in spite of the fact that his actual constructive procedure was rigidly logical and systematic. He sometimes, however, appeared satisfied with meager definitions. His basic view of personality, for instance, would probably have been more persuasive to his readers had it been more fully elaborated, especially in relation to biology and abnormal psychology.

Yet these limitations should not obscure the fact that Bowne was a philosopher in the true sense of the word, and a genuinely great man. He was brilliant in polemic and synoptic in vision. He should be studied for his clear and pungent literary style; for the thoroughness with which he shows how the antinomies of thought on every level are solved by personality, — what Knudson calls his "systematic methodological personalism;" and also on account of the relevance of his thought to the problems of contemporary epistemology and metaphysics. There is hardly any issue that has arisen since his death which one does not find treated, at least in germ, on his pages. His thought moved in the regions where the central and inevitable problems of philosophy are located. His personalism, therefore, is a way of understanding experience which will always have to be reckoned with, and which opposing views will have to consider.

DAS PROBLEM DER INDIVIDUALITAET

(*Abstract only*)

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DAS Problem der Individualität ist in allen rationalistischen Systemen eine unaufgehobene Schwierigkeit. Und doch ist die Individualität unser unmittelbarstes Erlebnis. Sie ist auch nicht zu verwechseln mit den Singularitäten, von denen der Sensualismus spricht. Die neuere Biologie, Psychologie, Soziologie haben wertvolle Tatsachen festgestellt, durch die das Problem in ganz neues Licht rückt. Danach ist die Individualität vor allem als eine Ganzheit zu nehmen, die jedoch nur durch irrationale Intuition zu erfassen ist. Versucht man sie rational zu packen, so stellt sie sich zugleich als Einheit in der Mannigfaltigkeit, als Dauer im Wechsel, als Typus neben radikaler Einzigkeit, als Isolation innerhalb unzählicher Bezogenheiten dar. Ungeachtet dieser Irrationalität ist die Individualität jedoch kein Chaos, sondern ein unentbehrliches Mittel der Erkenntnis, eine Kategorie, ohne die wir weder im Leben noch in der Wissenschaft auskommen. Es ist daher Aufgabe der Philosophie, diese irrationale Kategorie in ihrer Bedeutung zu würdigen. Wird sie richtig erfasst, so rücken besonders die Probleme der Geisteswissenschaften in ein ganz neues Licht. Auf das Weltganze angewendet, ergibt die Anwendung der Individualitäts-Kategorie eine neue Problemstellung der Metaphysik und der Religionsphilosophie.

REAL VS. ABSTRACT EVOLUTION

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WHETHER we shall make earnest with our increasingly unanimous professions of empiricism is the fundamental question of modern philosophy. So far have we failed to do so that a good case could be made for the contention that philosophers have not yet clearly seen just what an empirical method really involves. It is my purpose to develop briefly a single, though very decisive, instance of this lack.

In the main, our conception of empiricism as method is confined to its insistence that whatever appears is to be accepted without discount from bias or prejudice, and with a recognition that the categories in which we first pigeonhole it may be found on further acquaintance inadequate. This is a vitally important gain for thought, but it does not exhaust the implications of empiricism. Equally important is it to insist that whatever is found is to be accepted without discount *as* it is found, that is, that we shall respect not only the content of what appears but also the *manner and order in which it appears*. To violate the way in which the world is found is surely as unempirical as to violate the content revealed in the finding. In fact, when we reach the metaphysical issues involved, content and order cannot be abstracted from each other. This principle is exceedingly simple, but its consequences are far-reaching.

The main errors of past and current metaphysical systems and the startling conflicts of opinion which they show, are probably more due to a failure to maintain empirical faithfulness in this sense than to any other cause. It is almost impossible for one with the training and interest of a philosopher to be sincerely disloyal to the actual content of what is found, but all intellectual history shows how very easy it is to be disloyal to the way in which it is found. Yet the consequences of such disloyalty are the same as neglect of empirical method always tends to produce, that is, a set of contrasting and quite irreconcilable convictions, — contrasting, because in the absence of respect for the empirical order of appearance, whatever order personal interest dictates will be substituted for it; irreconcilable, because only by an appeal to the empirical order can any such disparate convictions be either verified or refuted.

Examine the feud reverberating throughout the history of metaphysics between idealism and naturalism in the light of this remark. The idealist, liking as he does to revel in contemplation of the largest meanings with which he has been able to unify his experience, insists on viewing everything that happens in its relation to these inclusive meanings; in God as the *ens perfectissimum* he sees the entire panorama of existence encompassed and articulated according to patterns of beauty and reason. His preference, in short, leads him to substitute for the empirical order an order of logical unfolding or purposive creation. Were he to take respectful note of the empirical order in which the world has really appeared he would be forced to recognize two facts that would radically modify his genteel and enticing scheme. One is the fact that there are many people who fail to grasp these harmonious meanings, for whose pilgrimage, therefore, the city of eternal peace provides no actual goal. The other is that in his own experience these meanings did not mark a beginning but a culmination; they were that toward which the world as he found it was moving, not that out of which it initially arose. The earlier stages, in his case, as with the rest of us, were marked by doubt, contradiction, perplexity unresolved, evil unconquered. Get him thus to respect the empirical order, and vast strides can at once be made toward a common metaphysical interpretation. But otherwise no one can refute his system, and only those of similar proclivities can verify it.

Idealism reigned in ancient and mediaeval philosophy, but the modern world has on the whole been moved by a different interest. Contemplative and reverent absorption in a unifying perfection has receded in favor of the practical ambition to master events. This interest has issued in naturalism, which asserts an order in many respects diametrically opposed to that of idealism, and equally remote from the one which empirical considerations would suggest. Instead of viewing things in relation to an enveloping and harmonizing Whole, naturalism views them in relation to the smaller units out of which they can be regarded as formed; it substitutes for the empirical order an order of genesis or (to assert the same thing somewhat more fully) an order expressing the combination of simple elements in the production of the complex grosser bodies of experience. This preference culminates metaphysically in a comprehensive theory of cosmic development, and evolutionary naturalism, which pictures the course of history as the gradual emergence of the world as we now see it out of the simplest inorganic elements which can be conceived to have existed in abstraction, according to laws inherent in the latter and under the restraint of environing conditions. The conception is obviously an extension, to the universe as a whole, of the order of relations which is uppermost whenever control over the production of effects is the dominant purpose. It need hardly be remarked that the phrase "emergent evolution," with which the Congress was especially occupied at an earlier session, is but a name for this cosmic naturalism, with emphasis on the relation between the complex later product and the simpler earlier elements out of which it arose.

Nothing illustrates so well the increasing grip of naturalism (in the unnatural sense in which the term is now used) on our thinking than the way in which philosophers of all schools vie with each other in their haste to accept the general hypothesis of emergent evolution and their eagerness to make contributions to its detailed development. Pragmatists and even idealists are joining the band-wagon along with their realist foes. Indeed, when we add the fact that those who try to stem the current do so on quite antiquated grounds, it seems as though no hope would be left in our day for the establishment of metaphysics on an empirical and verifiable foundation. To be sure, some doctrine of emergence is inevitable, because there are facts which are not inappropriately described by such a term. But it must be frankly faced that the form in which the doctrine is currently conceived is essentially unverifiable and self-contradictory. The complete arbitrariness of naturalism when considered in the light of an empirical standard, and the impossibility of either refuting or verifying the order into which it throws events, appear very quickly when the notion of emergent evolution is critically examined.

The self-contradictory aspect of the doctrine appears in the fact that, when we say a higher level of existence emerges out of a lower, we imply on the one hand that we are trying to explain the higher in terms of the lower, and on the other that such an explanation is impossible. Explanation of the simple in terms of the complex is always easy — we need merely tell what is left out in the process of abstraction — but it is admitted on all hands that the unique quality characterizing a complex level cannot at all be predicted from the simpler level out of which it emerges. Consequently the notion of emergence in this form is at best useless; it means the attempt to establish an explanatory relation where we frankly confess that none is to be found. If more needs to be said to secure this point, just glance at the form which the emergent doctrine has taken in its most prominent champions. We are told that all arises out of a matrix or primary level which is called Space-Time, or a whirl of electrons, and while we are wondering how these things of their own power can produce anything resembling the observable world, we discover that our metaphysician has kept a hidden solvent of all puzzles up his sleeve. We learn that he means by Space-Time or electrons not what the physicist means by these things, but magic entities equipped from the start, like the scholastic occult causes, with the highly complex ability to do precisely what we need to have them do. Space-Time, for example, is not merely the space and time of mechanics, but is endowed with a nisus toward all the higher levels, even deity itself. Can such manipulation of language free us from the charge of self-contradiction? Is it not a camouflaged way of saying, both that we can and that we cannot conceive the emergence of higher levels out of lower? The source of this confusion is, of course, our failure to notice that we are extending a method of explanation which only has meaning where practical control is possible to a situation where such control is admittedly out of the question. The only satisfaction such manipulations yield is the satisfaction of extending to apparent universality a mode of explanation to which our prejudice naturally inclines us.

The unverifiable aspect of the doctrine of emergence lies in the fact that it seeks to account for the genesis of experience itself, whereas the only way in which any theory can be tested is by appeal within experience. The main reason for this mistake is that, because it seems quite possible to observe the genesis of any particular individual's experience, we easily pass to the assumption that the genesis of experience at large can be described in the same terms. It is, however, essential to note that any theory which pretends to explain experience is shown by that very fact to be unempirical. It cannot be refuted, because the only facts which might refute it are facts of experience; it can only be verified, as in the case of idealism, by those subject to the same psychological peculiarities. Thus idealism and emergent naturalism are logically in exactly the same boat. Respecting, in the main, the content of the world as found, they yet substitute another order for the order in which it is found. The ultimate picture of the world in each case is hence empirically unverifiable, being organized according to interest and preference instead of fact. If this is to continue, one might as well just pick according to his taste, and let the merry war of the metaphysicians rage on.

Suppose, however, we retire a moment from this hopeless fray and consider seriously what conception of evolution and of emergence we might develop if we adhered to the empirical order of appearance, insisting on the same scrupulous faithfulness to the world of fact *as* it is found that we now insist upon to the content that is found. Time will permit me only to suggest and illustrate two points.

The most decisive clash that would appear between such an approach and the current naturalism would lie in the fact that *empirically the past always emerges out of the present rather than the present out of the past.* It can be laid down as a general principle that the world as empirically revealed always begins in the present, and remains within it while expanding into the past and the future. This may sound startlingly paradoxical; — the opposing view would, however, be much more startling if it were not so fully ingrained in our thought-habits that we never dream of questioning it. For any world-process empirically revealed and verifiable to begin in the remote past would be just as absurd as for it to begin in the remote future; it would have to be on its way long before or after it is empirically there. Appeal to fact on such a matter may be unconventional and embarrassing, yet I beg of you to consider whether the world as actually revealed to any of you began in a remote past with Space-Time or electrons, or whether these things did not emerge after the world had gone through many adventures and taken many shapes. Should anyone come forward and honestly affirm that his experienced world did begin with such metaphysical abstractions I should either secure his admittance to an asylum or surrender my whole case. But so confident am I that no experience is of this sort, that I am willing to affirm that real evolution, that is, evolution as empirically discovered, is not a movement from past through present to future — such a process is itself an emergent abstraction from the course of real evolution — it is evolution from the present into both the past and the future. The present is always the empirically given, not the remote past as hypothesized by the cosmic atomist, nor the remote future as envisioned by the religious seer. Such things are reached from the present. The world always takes shape from the present outward. It expands into the past as knowledge of the past is needed to satisfy present desires; it expands into the future as grasp of recurrent regularities permits anticipation, prediction, and intelligent purpose. But it remains within the present all the while, in fact it only generates a vastly larger present.

If we are to carry through such an approach it is obviously necessary to draw a clear distinction between real evolution and abstract evolution, between real time and the time of science. The latter category, abstractest of all dynamic abstractions, does not characterize the world at the beginning, it only emerges when the expanding process of real time has gone far enough for the meaning of a successive continuity to be clearly seized and the habit acquired of fitting events into it. Real evolution is thus not a temporal process if we mean thereby the time of physics; it is a more inclusive movement in which physical time will appear, as interest in anticipation and control takes definite form.

The appearance of abstract time in the process is, to be sure, a most momentous occurrence. For when it really comes it comes all at once, that is, when its meaning is grasped it is grasped in its entirety. This signifies that the world, in one of its individual perspectives, has expanded to infinity; all possible events, past and future, have become co-present in it; and any new occurrence, however remote in time, is a concretion within, not something in any respect externally added.

Once one has acquired some familiarity with this approach to metaphysics, the current dogmas of naturalism — this school being now more popular than idealism it offers a more seductive target for criticism — become truly grotesque in their arbitrary contradictions. They attempt to reduce real evolution to abstract evolution, a process already under way in a preëxperimental past; the form in which the world actually begins becomes a late product and (because of the impossibility of forecasting the complex when only the simple has been given), indeed, an accidental product, of that remote past. The actual beginning of the world, in fact every datum that is most indubitably certain and real, thus appears to be something that might never have been, the contingent effect of a dubious cause. Is any philosophical point of view more unnatural than this? It is, *par excellence*, the philosophy of the old woman in the nursery rhyme, whose petticoats you remember were cut while she slept on the king's highway. Her lost flounces, like the abstract past of the naturalist, seemed a more certain point of reference than her present self; at their removal her very identity became ambiguous, and she hastened to her dog in search of equally external identifications. Surely the past is far more accidental than the present. The present alone is truly essential, for without it no empirically discoverable world could exist at all. The past is necessary for the present only if you mean the abstract present of the time of science. In real time the past only becomes essential when it is required for the satisfaction of present needs.

The other most noticeable feature of this approach to metaphysics is that it extends radically the doctrine of perspectives as offered in Whitehead's philosophy into a systematic metaphysic. What this involves in detail is beyond the scope of a brief paper, but the central point is that *we mean by the world a harmony of perspectives*, each of which finds its focus in an intelligent organism. Whatever is found empirically to happen always involves the compresence of such an organism, and (which is still more important metaphysically) the way in which it happens is, in the last analysis, the way in which it comes to play the part that it does play in the development of the perspectives or centers of experience through which it gains its place in the objective order that we call the world. *The ultimate metaphysical laws* — ultimate because including all others and included by none — *are accordingly the laws by which the harmony of all perspectives gains form and order as such in the perspectives themselves.*

Let me concentrate for a moment on an illustration which will help bring out the necessity of this radical conception.

Suppose that I am a graduate student in philosophy, and when applying for a fellowship I tell my dean that I was born in 1900. What can I properly mean when I say that I was born in 1900? It is surely obvious that the perspective of the world which we call my experience did not begin to exist in 1900. What happened then was an event in the experience of my parents and their friends, not to become an event in my own till I have made enough progress in organizing a coherent world to be able to date events and tell when they happen. The world as I find it taking shape has had quite a history before this stage is reached, as will be confirmed by anyone who has observed the growth of a child's mind. In other words, my birth in abstract time does not occur in the real evolution of my experience till much else has happened in it. What is the implication of this? The most interesting consequence will appear if we pursue the matter a little farther. By the time the process of real evolution has gone far enough in me for my birth to occur in it, much that took place before my birth has also emerged. I have come to understand and use the conception of abstract time, and, therefore, all parts of it have become compresent with my thinking; any date or event before 1900 is just as much a distinction within my field of experience as my birth or any date after it. I know and make use of the happenings of the early Egyptian dynasties in terms of my present needs in exactly the same way as I do the events of any year since I was born, say 1912. All of them are concretions within the whole span of time over which my experience now reaches through having grasped its meaning. They emerge as my perspective expands; in no sense do I empirically emerge out of them. Does not this clearly reveal the necessity of drawing the distinction that is here urged between real and abstract time? Is the "I" which is experientially compresent with events that happened long before Christ to be consistently regarded as born in 1900 A.D.? If we are to keep our thinking straight on these matters we must clearly distinguish (Fig. 1) A from B. A is the first definite actualization of my world-perspective out of potentiality. B is an event primarily in the perspectives of my parents, not my own. As an event in my own perspective it emerges fairly late, and cannot properly be described as the birth of the "I" which is now able to know it.

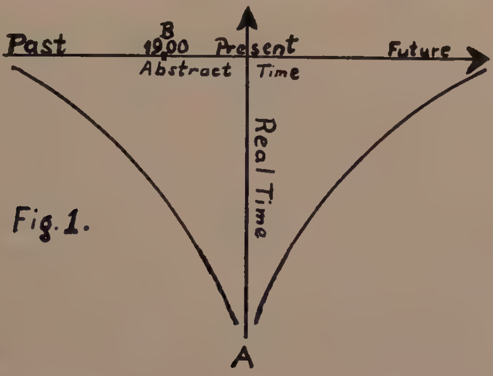

Fig. 1.

"Come now," you say, "surely you have gone mad with these hair-brained speculations. You are either foolishly trapped in the egocentric predicament, or are at heart an outright solipsist, making yourself identical with God, and fancying that the evolution of your meager experience is equivalent to the history of the whole universe. There is an objective time-order which includes your private experiences as well as those of your parents and all other people; once you have grasped the notion of this order there is no longer any excuse for confusing the succession of your personal discoveries with the order in which, as we find, all events in the real and common world take place. What will the geologist think of such aberrations? Will he lend a hospitable ear to the notion that the vast transformations of the pre-human ages really happened after those of his own childhood? Beware lest these wild fancies bring philosophy into further disrepute with sober men of science! The time is surely come for you to pronounce this all a joke, and join in the laugh at its paradoxes."

But I must affirm again and finally, the contrary opinion now seems to me much more humorous. Let me briefly reply to these objections.

(1) As regards the criticism of empirical method, that we must not confuse the order of discovery with the order of reality, I maintain earnestly that *the order of discovery is the order of reality, if we mean by reality something that can be empirically denoted and verified.* This is so because the order of discovery includes every other order, as something which appears and takes definite shape within it. Moreover, if theories as to the order of reality are not to be tested by the order of discovery, I see no possible way by which conflicting theories can be brought to court and the internecine war of philosophy ended.

(2) You insist, however, that every event in the order of discovery can be placed without remainder in what naturalism conceives to be the order of reality, and that if this be the case there is every reason from science and common life to adopt such an order. But the premise is precisely what I deny. *The fact that what you call the order of reality always does take shape as such in the order of discovery, in your experience and every other, is a true fact which cannot in honesty be omitted.* If our own early fumblings have so far become dim as to obscure this fact, we need only follow the naturalistic scheme of evolution itself back to the beginnings of science. Somewhere we shall reach a thinker who first clearly grasped an objective time-order in the course of his own experience, and in whose perspective therefore his own birth and all that preceded it first became empirical in the sense in which they are such for us. Hence to make philosophic coin out of the phrase "egocentric predicament" does not at all get us out of the predicament. We are in it once for all in the sense that the only world which we can be interested in and think about is the world that takes form and reality in the course of our experience. And impartial philosophers should not allow themselves panicky shudders at the bogey of solipsism, though the view here defended does not lead to such an extreme. The conception of the world as a system of perspectives or monads, a metaphysical scheme as hoary as the days of Leibniz, should not excite derision. Abstract evolution is the objective order that emerges when the living problems of the various perspectives have been solved and only the solution retained. Real evolution includes it and more — the story of how that objective order emerged out of the vagueness, uncertainty, and doubt which preceded.

(3) Finally, appeal to geology can hardly settle a metaphysical

problem such as is here in question. Only if the geologist found his perspective of the world to begin with the pre-human ages, would his work have any data to offer that is relevant to the present issue. I know of no geologist whose world begins with such abstractions. Of course in abstract time the ages he studies preceded the days of his own childhood. So much goes without dispute. But our question is of real time and its relation to abstract time. On that question no science has any contribution to make, except the science of genetic pyschology. There we will find profound illumination if we care to look. The point here maintained is simply that *no past event becomes an empirical reality until it has taken its place in the order of discovery. For that in the end is what empirical reality must mean.*

RAPPORTI FRA MORALE E RELIGIONE

GIOVANNI VIDARI
(*Turin*)

IL problema dei rapporti fra morale e religione, — problema così importante per il suo aspetto teoretico e per i suoi riferimenti pratici — può essere considerato da tre punti di vista.

Da un punto di vista psicologico esso si formula così: la coscienza morale, che è coscienza di un dovere da compiere, e che si presenta ora come sentimento della giustizia ora come sentimento della lealtà o del pudore o della gratitudine ecc., è essa necessariamente, cioè per propria natura, legata alla coscienza religiosa, che è coscienza di un mondo sovrasensibile, di un ordine divino, di un potere supremo creatore e conservatore del Tutto? La coscienza morale implica essa in sè, quando sia approfondita con l'analisi, elementi, cioè principii e motivi, proprii della coscienza religiosa? E questa, d'altra parte, non include in sè, o posti o risolti, in potenza o in atto, i problemi del dovere e della giustizia, del male e della sanzione?

Si tratta qui d'indagare se vi siano, in fatto, rapporti di dipendenza fra due aspetti vitali della coscienza, e, al caso, quali essi siano e da che comune fondamento a loro volta dipendano.

È noto che in questo campo si fecero da insigni studiosi indagini molte e acute; e basti qui citare i nomi del Ribot, del James, del Leuba, del Durkheim ecc.

Da un punto di vista storico il problema si presenta così: seguendo con attenta e serena ricerca il corso della storia civile dei popoli e della loro evoluzione spirituale dalle forme primitive alle più avanzate di civiltà, risulta che il complesso delle credenze, costumanze, istituzioni formanti la vita religiosa abbia avuto influenza sulla vita morale, e, al caso, in qual senso e in quali forme tale influenza si è dimostrata? E, d'altra parte, che cosa risulta dallo studio storico circa l'influenza inversa delle idee, costumanze e pratiche morali sulla evoluzione religiosa? È stata veramente, ed è tuttora, la religione la matrice e l'alimentatrice della morale; oppure questa si è svolta da sè e ha determinato e promosso l'evoluzione di quella?

Son problemi codesti, come si vede, di molta complessità, che non si possono trattare se non in concreto, cioè con riferimento preciso a questo o a quel popolo, a questa o a quella età storica. Fra i saggi più cospicui in questo genere di studii voglio citare quelli del Buckle, del Lecky, del Wundt, del Lévy-Bruhl, tanto nel caso della ricerca psicologica quanto in quello della ricerca storica, il problema dei rapporti fra morale e religione riceve luce soltanto dai fatti. Cioè, in ambo i casi, si tratta di conoscere come stanno, in fatto, le cose; se ci sia, o fin dove arrivi e in che senso si eserciti, la mutua dipendenza della morale dalla religione.

E qualcuno direbbe che non altrimenti di così può porsi e risolversi il problema, poichè non altro che l'indagine del fatto è a noi consentita. Ma è evidente che, qualunque sia la risposta che l'indagine storica o la psicologica può offrire, rimarrà sempre a chiedersi se noi possiamo concepire l'idea di una morale e di una religione in rapporto di dipendenza o indipendenza tra loro. Rimane sempre la possibilità di questo problema: dato che morale e religione sono prodotti o forme di manifestazione della vita spirituale, che posto occupano in tale vita, come vi trovano la propria giustificazione, in che rapporto stanno con le altre forme di manifestazione dello spirito?

Qui non è più una questione di fatto, ma, diremo, una questione di diritto e di valore: non si tratta più di sapere quello che la morale e la religione sono state o sono nella realtà positiva o psicologica o storica, ma quale concetto noi ce ne possiamo o dobbiamo formare in rapporto con il concetto generale dello spirito; *non che cosa esse sono ma che cosa valgono.*

È questo il punto di vista propriamente filosofico, che non annulla i precedenti, e che, anzi, in un certo senso li presuppone, ma che sta al disopra di essi, come la visione sintetica filosofica sta al disopra delle ricerche analitiche della scienza. Il problema in questo modo visto è stato presente alla mente di tutti i filosofi, e ha avuto le più diverse soluzioni, dallo Spinoza e dallo Spencer, dal Kant e dal Feuerbach, dal Comte e dall'Hegel, dal Gioberti e dal Bertini, dal Croce e dal Gentile.

Ma le soluzioni principali e più caratteristiche dell'importante e assillante problema si possono ridurre alle seguenti:

I

Il Positivismo, sollevandosi dalla nuda indagine del fatto alla speculazione intorno alla essenza della morale e della religione, dice col Comte: la religione non è che una illusione transitoria determinata dalla ignoranza scientifica delle cause dei fenomeni; come alla età teologica è succeduta la metafisica, che si illudeva di spiegare la realtà, non più con le forze divine, ma con le astrazioni della mente, così alla metafisica è succeduta, o succederà, l'età positiva, che si arresta alla ricerca dei fatti e delle relazioni di dipendenza causale e di solidarietà organica tra i fenomeni. Per lo Spencer invece la religione non è più una illusione transitoria, ma illusione sempre rimane, illusione permanente, determinata dallo sforzo, irrimediabilmente vano, di spiegare l'Inconoscibile. La morale, d'altro lato, è il risultato dell'adattamento alle condizioni d'esistenza, il quale si va facendo tanto migliore e più perfetto, quanto più si conoscono scientificamente le leggi di tale adattamento. Si ha quindi una specie di opposizione necessaria fra morale e religione: quanto più quella si fa scientifica, tanto più questa si avvicina a scomparire: la irreligione dell'avvenire (Guyau) è l'ultima parola del positivismo.

Ora è evidente che questa soluzione positivistica del problema è del tutto inadeguata alla natura tanto della morale che della religione: ambedue sono viste come fenomeni di natura e di origine fisica, l'una, la morale, determinata dalla resistenza opposta dagli individui alla convivenza sociale e dalla necessità naturale di piegarsi e adattarsi ad essa; l'altra, la religione, determinata dalla pressione che la natura esercita sulla mente ignorante e pavida. In ambo i casi la morale e la religione non hanno una radice nella vita dello spirito, ma soltanto nelle condizioni esterne fra le quali la vita spirituale si svolge; epperò non hanno alcuna validità in sè stesse, e non si può parlare di alcun rapporto intrinseco dell'una con l'altra. Con questa si connette l'altra osservazione che morale e religione non possono non avere nel positivismo una impronta radicalmente idealistica, perchè l'unico criterio col quale si può giudicare dall'individuo della potenza delle forze esteriori di pressione e di dominio non può essere che il criterio del piacere e del dolore. La morale non può essere che la condotta che si rivela, a conti fatti, o per abitudine ereditaria, più giovevole e quindi più utile; la religione non può essere che l'atteggiamento di fronte alla natura più atto ad assicurare la felicità in un qualche mondo. E infine la pronosticata irreligione dell'avvenire determinata dal progresso della conoscenza e della morale scientifica non corrisponde nè alla sconfitta della religione nè al trionfo della morale, perchè nè l'una nè l'altra sono viste dal Positivismo nella loro essenza spirituale. La irreligione dell'avvenire non può essere che effetto di incomprensione della religione stessa.

II

In una maniera del tutto opposta è trovata la soluzione dall'idealismo assoluto. Secondo questo, che ha avuto la sua prima grandiosa espressione nella dottrina di G. F. Hegel, e che ora è rinnovato, con impronta personale da G. Gentile, la religione e la morale entrano, del pari, ma a diverso titolo, nella concezione generale dello spirito.

Per il Gentile, come è noto, la religione corrisponde a un momento necessario dello sviluppo dello spirito, cioè al momento in cui il soggetto assoluto ponendosi come oggetto si riconosce e vive in esso. Dal momento della pura soggettività, in cui lo spirito si presenta essenzialmente come attività chiusa nella produzione e fruizione dei proprii fantasmi, cioè come attività artistica, si passa al momento della pura oggettività, in cui lo spirito si presenta come attività esteriorizzantesi nell'oggetto universale, cioè in Dio. Al terzo momento, infine, dello sviluppo dialettico dello spirito, in cui Soggetto e Oggetto si riconoscono identici nella unità del divenire storico, corrisponde la filosofia, la quale, dunque, costituisce la forma del pensiero pienamente adeguata alla essenza del Reale.

La morale non ha, d'altra parte, nell'idealismo attualistico del Gentile, un proprio particolare momento di attuazione, ma si realizza in tutta la vita spirituale, perchè questa è fondamentalmente volontà che attraverso alle opposizioni di bene e di male si svolge. E trova nel momento filosofico la sua realizzazione più consapevole, perchè si accompagna alla coscienza della legge secondo cui lo spirito assoluto storicamente diviene.

Ora a me sembra che anche in codesta concezione i rapporti fra morale e religione non siano esattamente visti, perchè non è vista nè la essenza della morale nè quella della religione.

Non quella della morale, perchè, pur essendo vero che questa è intrinseca alla vita dello spirito, essa implica una opposizione insuperata e insuperabile fra lo Spirito assoluto e il relativo, fra la legge che impera, che deve essere realizzata, e la volontà che ubbidisce e che si sforza di realizzare quella: lo spirito è, sì, volontà, ma non per questo volontà assoluta, nè, quindi volontà che sia sempre buona; la morale è, sì, nello spirito, ma non nello spirito assoluto, al quale, come voleva Kant, non si può dare altro attributo che quello di santo, non di buono, cioè di moralmente buono, che implica sempre una non immediata e non necessaria aderenza della volontà alla legge. In fondo (a essere francamente sinceri) si deve dire che nell'idealismo attualistico non c'è posto per la morale. Il Gentile è al di là del bene e del male, perchè nel divenire dialettico e storico dello spirito le opposizioni si annullano a beneficio dell'unità dello spirito, il quale poi, in verità è la stessa natura: *Deus sive natura.*

E nell'idealismo attualistico non è neppur vista con esattezza la natura della religione, perchè, se di questa è visto in un modo speciale l'aspetto intellettualistico e universalistico, non è visto, dirò così, l'aspetto sentimentale e individualistico. Cioè: Si vede bene che la religione è un modo di comportarsi dello spirito come pensiero, e precisamente è quello in cui esso si inchina dinanzi alla universalità dell'oggetto; ma non si vede che la religione è anche un modo di affermarsi dello spirito stesso come sentimento, e quindi come soggetto, una aspirazione, una attesa, una speranza in cui il soggetto vive ancora di fronte all'oggetto. In ciò sta la differenza profonda e insuperabile della religione dalla scienza, con la quale invece il Gentile, dominato dal lato intellettualistico del problema, la unifica. La scienza è, sì, rispondente al momento della pura oggettività perchè in essa non c'è che osservazione dell'oggetto, conoscimento di esso; ma la religione non può in nessun modo mettersi sul medesimo piano della scienza, se non a patto di mutilarla di ciò che le è essenziale, la riaffermazione della soggettività.

Il difficile del problema religioso e del rapporto fra morale e religione sta appunto nel determinare come il soggetto possa riaffermarsi di fronte all'oggetto, l'uomo di fronte a Dio.

III

Un altro modo di presentare i rapporti fra morale e religione è quello dell'idealismo Kantiano. Kant, come è ben noto, ha indagato profondamente la natura della morale, e ne ha vista la necessità nella vita dello spirito umano come fondata esclusivamente sopra la coscienza del Dovere, cioè della legge universale e puramente formale. Per lui la morale è la necessaria forma pratica di quell'attività spirituale, che nella vita teoretica è legata e circoscritta al campo dei fenomeni.

Essa è fondata sulla coscienza di un dovere assoluto, che è, per avventura, la forma di un Noumeno imperscrutabile; ma mon ha bisogno di religione, nè, in fondo, sbocca necessariamente nella religione. Il pensiero di Dio e di un mondo sovrasensibile è introdotto da Kant, non come necessaria integrazione del Dovere, ma come esigenza rationale del sommo bene, cioè dell'accordo fra la virtù e la felicità, come postulato della Ragione pratica. E su tale base il filosofo può, entro i limiti della sola ragione, procedere, come ha fatto magnificamente lo stesso Kant, a una interpretazione e giustificazione della fede religiosa.

Ora, qui, se si è raggiunto un concetto essenzialmente esatto della moralità, in quanto la si vede germogliare, con i caratteri che le sono proprii, dal fondo della vita spirituale, non si vede altrettanto bene l'essenza e la funzione della religione. Questa non è un fatto necessario, un momento o un aspetto della vita dello spirito, è piuttosto una escogitazione razionalistica, cioè essa ha posto nella filosofia kantiana in quanto Kant, avendo di fronte la religione, doveva proporsi di spiegarla, ma non la vede, oserei dire, non la sente nel suo contenuto vivo e drammatico come un particolare problema e atteggiamento dello spirito.

Inoltre, non avendo Kant ancora raggiunto il concetto dinamico dello spirito, cioè dello spirito svolgentesi per momenti o gradi, ciascun dei quali esce dal precedente per una necessità interiore, ed essendosi fermato al concetto dello spirito come esplicantesi nelle due forme fondamentali, la teoretica e la pratica, non poteva, in realtà, trovare un posto nel quadro della vita spirituale, nè alla attività estetica nè alla religiosa. In fatto la *Critica del Giudizio* e la *Religione entro i limiti della sola ragione* stanno, quasi direi, accanto alle grandi opere fondamentali teoretiche e pratiche, ma non ne derivano direttamente e necessariamente.

Non si può, dunque, parlare di rapporti intrinseci fra la morale e la religione se non là dove l'una e l'altra sono del pari inserite, per legame necessario, nel quadro della vita spirituale.

Ed ecco come a me pare che la cosa si presenti e il problema si risolva.

IV

Anzitutto è da chiedersi quale posto tenga la morale nella vita dello spirito. Non basta rispondere che essa è la forma pratica dell'attività spirituale, perchè rimane sempre a determinarsi in che modo tale forma si caratterizzi, e come si distingua da altre eventuali forme di attività pratica. Benedetto Croce ha riposto l'essenza della moralità nella volontà dell'universale, intendendo distinguerla così dall'attività economica che è volontà del particolare e dell'individuale. Ma, prescindendo ora da ogni altra considerazione,[1] è certo che la volontà dell'universale implica un atteggiamento dello spirito o della coscienza, in cui il soggetto si pone di fronte all'universale, come di fronte a un principio che, mentre come assoluto è fuori di ogni possibilità di comprensione o di riduzione entro le categorie dell'intelligenza, per un altro è categoricamente imperativo della volontà. Oggetto dello spirito è l'universale e assoluto; ma questo, non potendo essere compreso come concetto (perchè nessuna esperienza gli può corrispondere) è avvertito come pura forma, come puro dover essere, come legge. La coscienza morale è la stessa coscienza teoretica quando è portata al limite, quando, cioè, riconosce la pura forma universale al di fuori e al disopra di ogni esperienza, e quindi, per tal carattere, non più valida per la conoscenza di ciò che è, ma valida per la volontà di ciò che si fa. L'imperativo categorico nasce dalla medesima radice, onde nasce la relatività della conoscenza fenomenica; e la moralità non è qualcosa che si opponga al sapere scientifico, ma è uno sviluppo fondamentale della stessa costituzione fondamentale dello spirito.

La moralità poi, quando sia in se considerata, importa necessariamente l'ubbidienza assoluta del soggetto individuale di fronte alla legge. Quel medesimo soggetto che in un primo momento della coscienza, aveva espressa nella creazione artistica la sua trionfante e gaudiosa attività estetica affermantesicome illimitata, e che in un secondo momento aveva espresso nella conoscenza scientifica la sua attività intellettuale governata e contenuta entro gli schemi delle categorie mentali, in un terzo momento esprime nella moralità il valore assoluto della forma spirituale, che si libra categoricamente imperativa sulla vita e sull'attività del soggetto.

Ma la moralità, se è lo sbocco necessario della vita spirituale, non è il termine ultimo di essa; anzi, reca in sè una deficienza fondamentale. La moralità è dominio della legge sul soggetto, non è soppressione di questo; è negazione di esso, ma ad un tempo necessità di superarlo in una forma ulteriore, in cui esso riviva.

Il Caird, nella sua bellissima *Philosophy of Religion*, dice che la moralità non può essere che una parziale soluzione della contraddizione fra « the natural and spiritual, the actual and ideal, the individual and universal nature of man, »[2] e che una soluzione completa e definitiva di tale contraddizione si ha « beyond the sphere of morality into that of religion. » L'essenza della quale è per lui questa di cambiare l'aspirazione della moralità in fruizione, l'anticipazione in realizzazione. Il soggetto, infatti, nell'atto medesimo in cui ubbidisce alla legge, avverte la singolarità del suo atto e del suo Io di fronte alla universalità e assolutezza di quello Imperativo; egli non ubbidirebbe se non fosse il relativo di fronte all'assoluto, il singolo di fronte all'universale. Ma nel medesimo tempo, e per una necessità interiore, aspira a superare quella distanza, a identificarsi con quell'assoluto, a rendere perfetto il suo volere santificandolo, cioè adeguandolo al Santo: « al Dio dei santi ascendere, »[3] santificato dal proprio patire, cioè dalla propria ubbidienza al Dovere.

D'altra parte accade anche che la stessa singolarità avvertita dal soggetto nelle sue aspirazioni all'Infinito e Assoluto implichi in sè la pluralità dei singoli; perchè, infatti, il singolare e individuale non può esser tale che della pluralità; la quale poi non può concepirsi nei rapporti con la legge assolutamente e universalmente imperativa, che come una pluralità infinita, perchè una pluralità finita porrebbe, quasi direi, dei limiti alla stessa imperatività assolutamente universale della Legge. Il soggetto, quindi, nell'atto in cui si incurva ubbidiente al Dovere, implica la riaffermazione degli infiniti soggetti singoli in tale ubbidienza; epperò, a un tempo, la necessità e, anzi, la realtà della unificazione di essi nella volontà della Legge. Il *fiat voluntas tua* vuol dire a un tempo *adveniat regnum tuum*, cioè: si realizzi, con l'ubbidienza morale, l'unione dei soggetti spirituali nella volontà della Legge, cioè nella attuazione del Regno di Dio.

Così la religione, cioè il legame delle volontà individuali con la volontà superna, epperò delle volontà fra di loro, scaturisce spontaneamente dalla morale, come la risoluzione necessaria di un problema che la morale pone e che essa, per sè, non risolve. Fermarsi alla morale è possible, perchè essa erige una barriera maestosa, oppone un muro di bronzo, alle volontà umane, e tutte a sè le sottomette, ma non è chiuso con la morale lo sviluppo dello spirito: questo, anzi, giace, per il fatto stesso della morale, in uno stato di inquietudine e di anelito, che la coscienza del Dovere copre, ma non soffoca. Onde si rende necessario tanto per il filosofo che cerca di approfondire i problemi della coscienza, quanto per l'uomo che vive drammaticamente, cioè per conflitti e soluzione di conflitti, la propria vita, di andare al di là della morale, di trovare le ragioni della inquietudine o, direi anzi, della amarezza implicita nella stessa, pure orgogliosa, coscienza del Dovere, di ricollocare e far vivere il soggetto in una posizione nuova e finale, in cui l'esigenza morale sia soddisfatta e, a un tempo, il problema in esso implicito sia risolto.

Allora sorge la Religione co' suoi principii fondamentali del Dio Padre, degli uomini fratelli, del Regno finale di Dio; e si presenta come un legame non di semplice o di pavida sudditanza dell'uomo a Dio, ma di filiale e fiduciosa ubbidienza, come un legame, non di fredda e razionalistica uguaglianza fra i soggetti individuali, ma di amorosa e cospirante solidarietà. Ma tutto questo, s'intende, (e non farebbe d'uopo neppur di notarlo) ha un valore e una realizzazione soltanto nella vita dello spirito, cioè non si applica al mondo delle cose terrene, dove è mestieri, come diceva Dante, « di consorto divieto. »

V

Intesa la Religione in questo modo, cioè come un complemento necessario (non come fondamento) dell'Etica, o come una Metafisica dell'Etica,[4] si hanno alcune importanti conseguenze:

1ª) La Morale rimane giustificata da sè, indipendentemente dalla Religione; fondata sul principio del Dovere; inserita nel quadro della vita spirituale, come un momento necessario di essa;

2ª) La Morale però non appare sufficiente, per la stessa universalità razionale del suo principio, a concludere lo sviluppo dello spirito, bensì genera da sè, — e non per effetto di una collaterale e contingente riflessione —, il problema religioso;

3ª) La Religione, a sua volta, uscendo da radici essenzialmente morali, reca seco come insopprimibile l'impronta morale: La religione o è morale, o non è; una religione, che sia improntata esclusivamente di intellettualismo metafisico non risponde al problema fondamentale, che lo spirito si pone nel momento della religiosità;

4ª) D'altra parte, la religione, pure uscendo da radici naturali, supera la morale stessa, poichè il problema che essa si pone, quello, cioè, della riaffermazione del soggetto di fronte all'oggetto assoluto, dell'uomo di fronte a Dio, non può trovar posto che in essa e nella *Fede* che la pervade;

5ª) Infine, posti tali rapporti fra la morale e la religione, e concepiti ambedue nel processo generale della vita dello spirito, essi concorrono a corroborare una concezione filosofica, che è bensì soggettivistica e kantiana per il suo punto di partenza, ma che, accogliendo il concetto dello sviluppo, ne trae la spiegazione organica di tutti i più alti prodotti dello spirito, e si conclude con una rivendicazione del pluralismo teistico, quale è implicito nella più pura tradizione della filosofia classica e cristiana.

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[1] Cfr. *Il concetto di fine e di norme in Etica* nel mio vol. *Etica e pedagogia.* Ed'r. Valecchi, Firenzi.

[2] Caird, *An Introduction to the Philosophy of Religion* (Glasgow, 1901), p. 277.

[3] *Manzoni*, Coro dell' *Adelchi.*

[4] Questo concetto di una necessaria metafisica dell'Etica io esprimeva già nella mia *Etica* (V. edz. Hoepli); cfr. anche la mia *Teoria dell'Educazione* (II, edz. Hoepli), e la mia recente *Educazione dell'uomo* (Torino Paravia).

Division B

LOGIC, EPISTEMOLOGY, AND PHILOSOPHY OF SCIENCE

1. GENERAL SESSION

Time: Friday, September 17, 2.30 P.M.
Place: New Lecture Hall
Subject: Continuity and Discontinuity Among the Sciences
Chairmen: FRANK THILLY, Cornell
E. B. McGILVARY, Wisconsin

L'UNITÀ DELLA SCIENZA

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IL problema dell'unità della Scienza, ovvero della continuità e discontinuità fra le scienze, può essere considerato sotto due aspetti:

1. Per riguardo alla *realtà* che le nostre scienze prendono come *oggetto*,
2. e per riguardo alla *mente* che costruisce la Scienza e quindi all'organismo logico che ne costituisce l'aspetto *subiettivo*.

1. Alla base della Scienza stessa sta un postulato fondamentale che — mentre porge il criterio direttivo d'ogni ricerca — ha ricevuto dal progresso scientifico una conferma sempre più larga. Questo postulato è l'interdipendenza di tutti i « fenomeni, » a cui si riduce e in cui si esprime il principio della causalità, secondo la critica moderna. Non è possibile spezzare il reale in campi distinti ed irreducibili, e così distaccare un ordine di fenomeni dall'ambiente di luogo e di tempo in cui si svolge.

Per ciò che concerne la scienza fisica questa unità non è mai stata posta in dubbio, ma solo recentemente essa ha potuto trovare un'espressione bene adatta ai fatti, nella teoria elettrica della materia e delle forze. Vero è che la gravitazione universale che si fonde oggi nella dinamica di Einstein, non appare ancora collegata convenientemente col dominio dell'elettricità. Tuttavia i tentativi di collegamento, se ancora sollevino delle obiezioni, attestano pure la concorde fiducia dei fisici in una unità, che è loro prossimo compito di conquistare in una maniera positiva.

Più forti dubbi possono sollevarsi intorno ai rapporti tra i fenomeni fisici e i fenomeni della vita. Sono note le obiezioni che da Spallanzani fino a Pasteur si sono fatte valere contro la generazione spontanea, la cui ipotesi, se non m'inganno, trova oggi pochi sostenitori. Chi ammetta che una tale generazione sia impossibile anche in condizioni affatto diverse dalle nostre, quali possono essersi realizzate per esempio in un'epoca anteriore di formazione del nostro pianeta, è facilmente condotto a supporre una circolazione della vita nell'universo, come nella « Evoluzione dei mondi » di Savante Arrhenius. Allora può sembrare che fra il campo della biologia e il campo della fisica rimanga una discontinuità radicale. Nondimeno anche in quell'ipotesi non è detto che debba rompersi senz'altro l'unità del sapere. Tutt'al più potrà dirsi che la vera scienza completa diverrà in questo caso la biologia a preferenza della fisica, giacchè la natura fisica fa parte della natura vivente, onde una spiegazione o concezione di questa non può prescindere dall'ambiente fisico.

2. Ma l'unità della Scienza vuolsi cercare e discutere non tanto sotto l'aspetto oggettivo quanto sotto l'aspetto subiettivo, cioè considerando il processo logico delle scienze, e le intuizioni e i concetti che in esse si fanno valere come criteri direttivi della ricerca. A questo riguardo giova anzitutto rilevare l'interdipendenza degli sviluppi storici delle singole scienze; come si vede per esempio nell'influenza che il metodo sperimentale galileiano ha esercitato sulla ricerca biologica moderna.

Tuttavia non si può tacere che il tentativo più radicale di portare anche nel campo biologico la veduta del meccanicismo affacciatasi agli inizi della fisica moderna, ha sollevato in ogni tempo le più gravi obiezioni. Le quali, bisogna dirlo, tengono forse in gran parte alle consequenze metafisiche che si sono volute trarre sulla base del meccanicismo. La critica moderna ha ormai denunziato questa mitologia meccanica che trova giudici severi non tanto tra i filosofi idealisti, quanto in alcuni critici della conoscenza, imbevuti di uno spirito positivistico, quali Mach, Pearson, ecc. Frattanto si può dire che la stessa ipotesi meccanica è in qualche modo abbandonata nello sviluppo della fisica contemporanea, sebbene a dir vero anche la nuova ipotesi elettrica che viene a prenderne il posto possa ritenersi ancora in senso più largo come un meccanicismo.

D'altra parte però anche la reazione antimeccanica del neovitalismo, che tende a separare radicalmente i fenomeni della vita dalla fisica, sembra sia ormai per cedere di fronte al promettente sviluppo della chimica biologica.

Ma giova considerare più da vicino il significato della spiegazione scientifica contenuta nel meccanicismo e riconoscere ciò che in essa vi ha d'incompleto già per riguardo alla fisica; così le difficoltà che tale spiegazione solleva nel campo biologico, verranno ad apparire in una luce diversa non riuscendo più a segnare una radicale distinzione fra i due campi del sapere.

Anzitutto il matematico può vedere per esempio la teoria dei fenomeni ottici espressa nel sistema di certe equazioni differenziali che rappresentano le onde elettromagnetiche; per lui allora la luce diventa un semplice caso particolare delle onde hertziane. Ma evidentemente questa teoria formale trae il suo pieno significato dalla conoscenza del fatto che si ha qui veramente una estensione del fenomeno luminoso, in cui si ricade per una certa lunghezza d'onda; che in tali condizioni le onde siano percepite come luce, mentre in altre condizioni sono sperimentabili in maniere diverse, questo è propriamente il senso qualitativo dell'ottica di Maxwell-Hertz, che in ogni caso deve aggiungersi allo schema quantitativo. Siffatto complemento di nozioni qualitative è necessario per ogni rappresentazione meccanica nella fisica, si comprende quindi come esso acquisti un'importanza crescente mano mano che si va verso i fenomeni più complicati della biologia. La vita può essere compatibile col meccanicismo e tuttavia l'ipotesi meccanica può restare indifferente ad una vera spiegazione biologica, perchè in questa l'elemento qualitativo assume un'importanza fondamentale.

Io non voglio indugiarmi su una discussione particolareggiata del problema se veramente nei fenomeni della vita appaia qualche cosa d'incompatibile col meccanicismo; l'esame della questione che ho svolto nei « Problemi della scienza » mi ha condotto ad una conclusione negativa.

Ma desidero invece di fermare l'attenzione sul posto che i problemi qualitativi possono trovare nella stessa meccanica e mostrare quale aspetto proprio vengano ad assumere le questioni concernenti la storia di un sistema meccanico. È noto che la meccanica classica traduce il problema di un sistema dinamico per mezzo di equazioni differenziali del secondo ordine, da cui restano eliminate le cosidette costanti iniziali; per mezzo delle quali si possono fissare in un dato istante posizioni e velocità. Pertanto infiniti sistemi possibili, corrispondenti a valori diversi delle costanti iniziali, vengono a cadere sotto il medesimo schema formale. Ma sebbene questi formino un insieme continuo col variare di quei dati, pure la loro storia cioè, la loro individualità, dipende dai dati stessi, in tal modo che una piccolissima variazione dei medesimi fa passare da un sistema stabile ad un sistema instabile o da un sistema periodico ad un altro non periodico.

Pertanto le costanti iniziali figurano nello studio di un sistema dinamico come un elemento casuale; per così dire la vita del sistema non è meno soggetta ad accidenti della vita di un qualsiasi organismo biologico. Questo si può dire dunque dell'evoluzione della terra o del nostro sistema planetario, che offrono esempio di sistemi dinamici di cui particolarmente ci interessa la storia. Aggiungo che la considerazione non verrebe mutata se, in luogo della meccanica classica, si assuma l'ipotesi di una meccanica ereditaria, ove ben più che le costanti iniziali compariranno, come dati delle equazioni funzionali, le funzioni inerenti al passato del sistema. Qui anzi il significato propriamente storico del problema appare in più chiara luce. La considerazione del « caso » acquista d'altra parte una speciale importanza nella *Dinamica dei Quanta.* In un sistema di elettroni accade di tanto in tanto che qualcuno di questi passi dalla sua orbita ad un'altra; questo passaggio, essenzialmente discontinuo, venendo accompagnato da uno scambio di energia coll'ambiente esteriore. Ora il fisico non chiede la ragione di tale fenomeno elementare, anzi lo tratta addirittura come casuale, limitandosi a tener conto statisticamente del numero degli elettroni per cui si verifica.

Qualcuno ha voluto indurre da ciò che la dinamica quantistica abbandoni il principio del determinismo universale, che da Democrito in poi è divenuto la base di ogni sano giudizio scientifico. Si vorrebbe trovare qui un margine per speculazioni che mi sembrano di carattere assai dubbioso. Se la scienza deve veramente soddisfare le esigenze fondamentali della nostra ragione, la semplice circostanza che si possa costruire sopra una specie di postulato di ignoranza dei fatti elementari, non autorizza a renderla incomprensibile nei suoi principi, mercè l'abbandono del rigido concetto della causalità. Comunque può essere qui una questione di sentimento personale che altri giudicherà diversamente. A me basta avere indicato come la cosidetta spiegazione meccanica rimanga ad ogni modo una spiegazione incompleta: grado formale della scienza, e non ancora scienza nel suo intero significato. Cadono insieme le osservazioni mercè cui si vorrebbe rompere la continuità delle scienze, assegnando al meccanicismo un valore pieno in un campo e ritenendolo affatto inadequato in un altro campo del sapere.

Nella discussione che precede ho appena toccato alcuni punti che generalmente richiamano l'attenzione nel probleme dell'unità della scienza. Ma mi sembra opportuno dire ora più chiaramente quale sia il presupposto di quella discussione, cioè spiegare la vera natura del problema proposto.

L'esame comparativo delle conoscenze acquisite e delle teorie costruite nelle varie scienze, può dare bensì occasione a considerazioni interessanti intorno a quel problema. Pure non si deve credere che una risposta decisiva possa venire in qualche modo da un' esperienza ovvero dal confronto ragionato di molte esperienze. Giacchè l'esperienza stessa assicura un senso soltanto attraverso i criteri interpretativi della ragione. E la *ragione* è insomma lo sforzo del nostro pensiero per conseguire una *comprensione unificata* dell'esperienza.

Tutta la storia della filosofia attesta questo sforzo e l'esigenza fondamentale da cui esso ha origine. Noi vogliamo *una* Scienza del nostro *Universo* e la storia ci mostra che un notevole progresso è stato fatto verso questa meta, se anche siamo ben lontani dal raggiungerla. Per aver avuto fede nel principio che essa suppone è riuscito all'uomo di spingere i suoi occhi nelle più remote regioni dello spazio e nelle epoche più lontane del tempo, e di scoprire sempre il dominio delle medesime leggi. È ben vero che il progresso non è stato sempre rettilineo; alla fiducia di tenere in qualche modo l'unità è succeduta generalmente la scepsi; cioè il dubbio che particolari difficoltà troppo leggermente esaminate possono offrire un ostacolo insuperabile allo scopo. Così ai grandiosi sistemi metafisici che tendono a dar forma universale al pensiero dell'unità del mondo, succedono spesso le filosofie dei compartimenti-stagni che inculcano all'uomo di attenersi prudentemente a regole determinate in singoli campi d'esperienza, senza permettere che l'uno agisca pericolosamente sull'altro.

Vi è un punto fondamentale su cui vorrei fermarmi per conchiudere questa relazione. Giova rilevare francamente che l'unità della scienza è avversata spesso per ragioni d'ordine morale e religioso, da filosofi che in nome di questi valori combattono il determinismo scientifico ed anche l'idea stessa d'una scienza indifferente ai valori umani. Filosofi di tale specie ammettono soltanto una scienza circoscritta, per i bosogni pratici della vita, ma giudicano che l'idea scientifica venga a costituire un pericolo tostochè assorga alla pretensione di suggerire una veduta del mondo. Questo atteggiamento pragmatistico del pensiero ha certo, come già sopra ho accennato, qualche giustificazione in un falso scientismo che era di moda trenta o quarant'anni or sono. Ma, da un punto di vista immanente, nulla mi sembra più contrario ad una giusta comprensione della storia della scienza ed anche ad un alto senso del pensiero religioso. La scienza non sorge dal fine pratico ma da una attività che partecipa dell'arte o della poesia, le cui profonde radici si ricollegano a quelle della religione. Per sua natura la scienza nasce da un bisogno universale e tende all'universale. Il conflitto stesso fra il pensiero scientifico e il pensiero religioso testimonia della intima solidarietà fra questi due atteggiamenti dello spirito umano. Ho trattato più largamente questo soggetto nell'ultimo capitolo del mio libro « Scienza e razionalismo » ed. Zanichelli, Bologna, 1912.

Se lo sviluppo logico della scienza viene costruito sulla base del principio di causalità, con esclusione delle spiegazioni teleologiche, nondimeno l'aspetto teleologico appare essenziale nella considerazione subiettiva del processo scientifico. La vera logica di questo processo non è quella che trae dai principi le consequenze giungendo a riattaccare alle nostre teorie l'infinita varietà dei fatti, ma piuttosto quella per cui ogni teoria è data come risposta provvisoria ad un fine conoscitivo, che la ragione realizza in essa perfettamente e tende ognora a superare. Di questo fine o piuttosto di questa serie progressiva di fini è difficile spiegare l'intrinseca natura. Ma certo ci si manifesta il desiderio supremo dell'anima nostra di cogliere e dominare i dati della realtà e di armonizzarli in un ordine, che è forse un riflesso delle preoccupazioni morali dell'umanità. In pari tempo ci è la fede che codesti dati soddisfino ad un qualche postulato di intelligibilità, per cui insomma la natura o il mondo non restino affatto estranei al pensiero dell'uomo. Proprio questa fede ravviano l'atteggiamento mentale dello scienzato a quello del mistico, e spiega il legame storico che si è osservato tante volte — e in una forma particolarmente interessante nei pitagorici — fra lo spirito matematico e lo spirito religioso. È convien dire che il pensiero matematico ha agido sempre in questo connubio, nel senso di chiarificare e purificare l'idea religiosa.

Oggi non è probabilmente da aspettarsi che matematiche e religione o più in generale scienza e religione abbiano a congiungersi in forme di pensiero così strettamente armonizzate ed unificate come avvenne nel passato e cui abbiamo rievocato il ricordo. Perchè l'evoluzione porta sempre a differenziare le forme e gli organismi più alti e complessi. Nondimeno io ritengo che lo spirito scientifico nella sua comprensione più elevato debba sempre esercitare un'influenza sullo spirito religioso. Alla scienza oggi come in passato la ragione può sempre attingere la veduta di quella libertà del pensiero che non significa rinnegamento dell'azione re-

ligiosa, ma affermazione del rispetto e dell'individualità della coscienza. Perchè infatti il mondo delle coscienze umane accoglie in sè una varietà infinita di rappresentazioni, in cui uno stesso ideale sembra rifrangersi in forme spesso esclusive ed opposte. Ma la nostra anima tende pure a superare il limite di queste esclusioni collo stesso sforzo con cui la ragione dello scienziato vuol sollevarsi sulle apparenti discontinuità dei fatti per cogliere l'interezza del mondo reale nell'unità della Scienza.

UEBER UNTERSCHIEDE UND ZUSAMMENHANG ZWISCHEN WISSENSCHAFTEN

Erich Becher
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Die Wissenschaften sind Gedankensysteme, welche auf die Erkenntnis gewisser Gegenstände oder Gegenstandsgebiete abzielen; um dieser Ziele willen werden die Wissenschaften von dem nach Erkenntnis strebenden Menschen geschaffen und gepflegt. Darum ist das Wesen einer jeden Wissenschaft in erster Linie durch ihr Ziel bestimmt, und da dieses, wie gesagt, immer in der Erkenntnis eines gewissen Gegenstandes oder Gegenstandsgebietes besteht, wird zunächst eben dieser Gegenstand oder dieser Gegenstandsgebiet das Wesen einer Wissenschaft bestimmen; so bestimmt z.B. die Eigenart der Zahlen das Wesen der zahlenwissenschaftlichen Mathematik. Von den Uebereinstimmungen und Verschiedenheiten im Wesen der verschiedenen Wissenschaften hängen nun wieder Zusammenhang und Abstand zwischen ihnen ab. Und so werden diese Beziehungen zwischen den Wissenschaften zunächst durch die Zusammengehörigkeit oder Verschiedenheit ihrer Gegenstände bedingt sein. Die Beziehungen zwischen den zu erforschenden Gegenständen sind in erster Linie bestimmend für das „natürliche System" der Wissenschaften, für die ihrem ganzen Wesen angemessene Klassifikation.

Zur Erreichung ihrer Ziele, zur Erarbeitung der Erkenntnis ihrer Gegenstände, gebrauchen die Wissenschaften bestimmte Erkenntniswege, -methoden oder -verfahren. Diese sind Mittel zum Zweck; sie müssen demnach geeignet sein für denselben, d.h. zur Erkenntnis der Gegenstände der betreffenden Wissenschaften. Sonst müssen die Erkenntnismethoden den zu erkennenden Gegenständen entsprechen, und auch sie müssen charakteristisch sein für die verschiedenen Wissenschaften. So berühren sich Wissenschaften, die einander nahestehende Gegenstände erforschen, wie z.B. die Botanik und Zoologie, auch in ihren Forschungsmethoden; und Wissenschaften, die so verschiedene Gegenstände haben wie Zahlentheorie und Kunstgeschichte, haben auch sehr verschiedene Methoden.

Die Erkenntniswege oder -methoden hängen nun aber, soweit sie schliessende Verfahren darstellen, nicht nur von ihren Zielen, von den zu erkennenden Gegenständen, ab, sondern auch von ihren logischen Ausgangspunkten, d.h. von den letzten Erkenntnisgrundlagen, den grundlegenden Erkenntnissen oder Urteilen, auf die sich die Erkenntnisgewinnung und -sicherung stützen muss, welche sich durch (deduktive und induktive) Schlussverfahren vollzieht. So stützt sich die deduktive mathematische Methode auf die mathematischen Axiome als apriorische Erkenntnisgrundlagen, und die induktive Methode der Naturwissenschaften stützt sich ausser auf gewisse apriorische insbesondere auf empirische Erkenntnisgrundlagen, auf durch empirische Wahrnehmung gesicherte Urteile. Zum Erkennen bestimmter Gegenstände brauchen wir wie bestimmte Methoden so auch bestimmte Erkenntnisgrundlagen, d.h. letzte, nicht mehr durch Schliessen sicherzustellende Erkenntnisse oder Urteile, auf die sich das weitere, schliessende Erarbeiten und Sicherstellen von einschlägigen Erkenntnissen stützen muss. Auch die Erkenntnisgrundlagen sind daher für die Beziehungen, für Berührung und Abstand zwischen den Wissenschaften von wesentlicher Bedeutung.

Die Erkenntnisgegenstände, -methoden und -grundlagen der Wissenschaften repräsentieren deren Ziele, Wege und Ausgangspunkte. Zusammengenommen bestimmen sie das ganze Wesen der Wissenschaften. So werden auch die Zuzammenhänge and Abstände zwischen denselben, so wird die ihrem Wesen adäquate Klassifikation, das „natürliche System" der Wissenschaften durch ihre Erkenntnisgegenstände, -methoden und -grundlagen bestimmt. Wenn man eine vergleichende Wissenschaftslehre, gleichsam eine vergleichende Anatomie der Wissenschaften, durchführen will, so hat man im Wesentlichen eben diese drei Faktoren zu betrachten.

Wir wollen nun im Folgenden zunächst einige besonders einschneidende Unterscheidungen von grossen Wissenschaftsgruppen durchführen und damit Ansätze zu einem natürlichen System der Wissenschaften aufweisen, in dem diese nach Berührungen und Abständen, nach ihrem ganzen Wesen und Aufbau anzuordnen sind. Hier können nur einige Grundlinien zu einer solchen adäquaten Klassifikation und vergleichenden Theorie der Wissenschaften angedeutet werden. (Eingehend behandle ich die hier nur kürz berührten Probleme in meinem Buche: „Geisteswissenschaften und Naturwissenschaften.“ Duncker und Humblot, München und Leipzig, 1921.)

Im weiten Reiche der Wissenschaften wollen wir zunächst Real- und Idealwissenschaften unterscheiden. Jene, zu denen die Geistes- und die Naturwissenschaften gehören, haben daseiende oder Realobjekte, also seelisch-geistige, psychophysische und körperliche Realgegenstände zu erforschen. Die Idealwissenschaften hingegen, z.B. die rein-mathematischen Disziplinen, behandeln daseinsfreie, Soseins-oder Idealobjekte.

Was unter Dasein oder Realität zu verstehen ist, wissen wir aus der unmittelbaren Wahrnehmung der eigenen, gegenwärtigen Bewusstseinsinhalte; diese, z.B. die Empfindungen, Gefühle and Wünsche, weisen allesamt das Moment des Daseins oder der Wirklichkeit oder Realität auf, im Gegensatz zu bloss gedachten Gefühlen usw., denen das Dasein oder die Realität fehlt. Im täglichen Leben und in Natur- und Geisteswissenschaften pflegt man (meines Erachtens mit Recht) anzunehmen, dass es ausser den bewusstseinsimmanenten auch bewusstseinstranszendente Realgegenstände gibt, mit anderen Worten, dass jenes uns von unseren Bewusstseinsinhalten her bekannte Moment, welches wir Dasein oder Realität nennen, auch Gegenständen eigen ist, die sich nicht in unserem Bewusstsein finden. Die Realwissenschaften sind nun jene Disziplinen, die auf die Erkenntnis der bewusstseinsimmanenten und bewusstseinstranszendenten Realobjekte abzielen.

Wenn wir vom Dasein eines Realobjektes abstrahieren, so bleibt seine Beschaffenheit, sein Sosein übrig. Erkenntnisgegenstände, die zwar ein Sosein, nicht aber Dasein besitzen, weil ihnen dieses durch Abstraktion genommen worden ist oder aber von vorne herein fehlte (wie z.B. den imaginären Zahlen), bezeichnen wir als daseinsfreie, als Soseins- oder Idealobjekte. Nehme ich z.B. den blauen Himmel wahr und abstrahiere ich dabei vom Dasein des Wahrgenommenen, auch von seiner Ausdehnung, Gestalt, Nuance usw., so kann ich in dieser „Soseinswahrnehmung“ oder „Wesensschau“ das Sosein oder Idealobjekt oder Wesen „Blau“ unmittelbar erfassen. Ausser durch vom Dasein absehende, dieses gleichsam „einklammerende“ Soseinswahrnehmung oder „Wesensschau“ (Husserl) kann man noch durch gedankliche Neukonstruktion (Modifikation, Neukombination usw.) zu Soseinsobjekten kommen. Die

Mathematik entnimmt ihre einfachsten Idealobjekte (z.B. den Punkt, die Gerade, die positiven ganzen Zahlen, die Summe) der „Anschauung," genauer einer Soseinswahrnehmung, die vom Dasein und von manchen sich der Wahrnehmung darbietenden Soseinszügen (z.B. von der Breite und Farbe eines geraden Striches) abstrahiert; weiterhin gelangt aber der Mathematiker durch gedankliche Neukonstruktion zu neuen Soseinsobjekten (z.B. zum vierdimensionalen Raum und zu den imaginären Zahlen). Bei allen ihren Gegenständen aber (auch bei den sogenannten reellen Zahlen) sieht die reine Mathematik davon ab, ob sie hier oder dort in der Welt realisiert oder mit Dasein behaftet sind; ob es reale Geraden oder Kugeln oder Summen in der Welt gibt, geht im Prinzip die reine Mathematik nichts an. Für sie sind die Geraden, Kugeln, Summen, usw. ebenso wie die nicht-euklidischen Räume und die imaginären Zahlen nur Soseinsarten oder Idealobjekte. Sobald der Mathematiker sich um das reale Vorkommen seiner Objekte kümmert, verlässt er den Boden der reinen Mathematik, das Gebiet der Idealwissenschaften; er betritt das Feld der Realerkenntnis und Realwissenschaften, in denen er seine idealwissenschaftlichen, rein-mathematischen Erkenntnisse anwendet.

Auch ausserhalb des Rahmens der reinen Mathematik gibt es Soseinsgegenstände oder Realobjekte und auf sie bezügliche Soseinsurteile und Idealerkenntnisse. So können wir z.B. über das Sosein oder Idealobjekt „Rot" und das Sosein oder Idealobjekt „Purpur" das Soseins- oder Idealurteil fällen: Rot und Purpur sind ähnlich. Da dieses Idealurteil wahr ist, stellt es eine Idealerkenntnis dar. Selbstverständlich gehört diese in den Rahmen der Idealwissenschaften.

Der einschneidende Unterschied zwischen den Realwissenschaften und den Idealwissenschaften ist demnach zunächst durch den Unterschied ihrer Erkenntnisgegenstände, der Real- und der Idealobjekte, bestimmt. Nach dem oben Dargelegten wird er sich aber auch in den Erkenntnismethoden und Erkenntnisgrundlagen wiederspiegeln. Das ist in der Tat leicht ersichtlich. Wir betrachten zunächst die Erkenntnisgrundlagen und dann die Methoden, da die schliessenden Methoden sich auf jene stützen müssen. Auch wollen wir die Idealwissenschaften vor den Realwissenschaften behandeln, weil bei diesen die Erkenntnisgrundlagen der Idealwissenschaften ebenfalls eine Rolle spielen, jedoch noch weitere Grundlagen hinzukommen.

Die Erkenntnisgrundlagen der Idealwissenschaften, d.h. die letzten Urteile, auf die sich alles idealwissenschaftliche

Schliessen stützen muss, sind teils analytisch, teils synthetisch. Die analytischen Urteile (z.B. die Aussage, dass alle Punkte eines Kreises gleich weit vom Mittelpunkt entfernt sind), sind durch ihren eigenen Gedankengehalt mit Notwendigkeit sichergestellt; sie sind denknotwendig wahr. Ganz anders steht es mit den synthetischen Erkenntnisgrundlagen der Idealwissenschaften, z.B. der Mathematik, etwa mit dem Urteil: Die Grösse einer Summe ist unabhängig von der Reihenfolge der Summanden, oder mit dem anderen Urteil: Zwei sich schneidende Geraden bilden vier Winkel zwischen sich. Was diese Urteile sicherstellt, ist eine Art von Wahrnehmung oder Anschauung. Es handelt sich jedoch nicht um die gewöhnliche, empirische Wahrnehmung, in der wir daseiende oder Real-Gegenstände in ihrer Tatsächlichkeit erfassen; vielmehr ist es die vom Dasein abstrahierende Soseinswahrnehmung, die uns synthetische Idealurteile sicherstellt, wie wir sie in den Idealwissenschaften als Erkenntnisgrundlagen (z.B. in der Mathematik als Axiome) brauchen. Die Soseinswahrnehmung ergibt, dass $a + b$ gleich $b + a$ sein muss, dass zwei sich schneidende Geraden vier Winkel zwischen sich haben müssen, dass Rot and Purpur ähnlich, Rot und Grün verschieden sein müssen, dass das Sosein oder das „Wesen" oder die „Natur" der Summe bzw. der sich schneidenden Geraden, bzw. von Rot und Purpur und endlich von Rot und Grün dies notwendig mit sich bringt. So sichert uns Soseinswahrnehmung synthetische Idealurteile, die von zusammengesetzten Soseinsobjekten (z.B. „zwei sich schneidenden Geraden" oder „Rot und Purpur"), Gestalten („vier Winkel") oder Beziehungen („ähnlich") aussagen, welche von jenen Soseinsobjekten mit Notwendigkeit gesetzt werden. Solche durch Soseinswahrnehmung gesicherten synthetischen Idealurteile bilden neben analytischen Urteilen die Erkenntnisgrundlagen der Idealwissenschaften, insbesondere der Mathematik.

Wie steht es nun mit den Erkenntnisgrundlagen der Realwissenschaften? Auch sie stützen sich auf analytische Urteile und auf durch Soseinswahrnehmung gesicherte synthetische Idealurteile. Das ergibt sich z.B. schon daraus, dass die Physik sich auf die Mathematik und also auch auf deren Erkenntnisgrundlagen stützt. Idealurteile können auf Realobjekte Anwendung finden, weil das, was einem Sosein notwendig angehört, ihm auch angehören muss, wenn es irgendwo in der Welt real existiert; weil z.B. Rot and Grün notwendig verschieden sind, müssen auch reales Rot und reales Grün verschieden sein.

Um nun Idealurteile auf Realobjekte anwenden zu können, müssen wir diese schon auf andere Weise festgestellt haben. Unmittelbar aber können wir Realobjekte nur durch Wahrnehmung erfassen. Wir wollen diese Art von Wahrnehmung, bei der nicht vom Dasein des Wahrgenommenen abstrahiert wird, im Gegensatz zur Soseinswahrnehmung als schlichte Wahrnehmung bezeichnen; sie repräsentiert die elementare Erfahrung. Die schlichten Wahrnehmungsurteile, d.h. die durch schlichte Wahrnehmung gesicherten Realurteile, stellen demnach die ersten für die Realwissenschaften in ihrem Unterschied von den Idealwissenschaften charakteristischen Erkenntnisgrundlagen dar.

Die schlichte Wahrnehmung kann nur Reales erfassen, das unmittelbar im Bewusstsein des Wahrnehmenden existiert. Darum brauchen wir zur Erkenntnis weiterer Realobjekte noch andere Erkenntnisgrundlagen. Um Aussagen über die Vergangenheit unseres eigenen Bewusstseins machen zu können, müssen wir voraussetzen, dass unsere Erinnerung uns vergangene eigene Bewusstseinstatsachen richtig wiederzugeben vermag. Diese Voraussetzung des Erinnerungsvertrauens kann in keiner Weise sichergestellt werden; wir müssen sie aber gelten lassen, weil sie unentbehrlich ist für unser Realerkennen und unsere Realwissenschaften, und weil sie sich befriedigend bewährt. Die Idealwissenschaften brauchen zwar praktisch ebenfalls unser Erinnerungsvermögen, haben aber im Prinzip nichts mit vergangenen Bewusstseinstatsachen zu tun und stützen sich daher logisch nicht auf die Voraussetzung der Erinnerungsvertrauens als Erkenntnisgrundlage.

Um zukünftige Realobjekte, reale Aussenweltsgegenstände ausserhalb meines eigenen Bewusstseins und Fremdseelisches (in Mitmenschen usw.) erschliessen zu können, brauche ich als weitere realwissenschaftliche Erkenntnisgrundlage die Voraussetzung, dass das Gesamtwirkliche sich regelmässig oder gar streng gesetzmässig verhält. Ohne diese Regelmässigkeits- bzw. Gesetzmässigkeitsvoraussetzung wäre unsere Realerkenntnis auf das unerträglich enge Gebiet des eigenen gegenwärtigen und vergangenen Bewusstseins eingeschränkt. Darum ist auch die Regelmässigkeits - bzw. die Gesetzmässigkeitsvoraussetzung eine unentbehrliche Erkenntnisgrundlage unserer Realwissenschaften. Auch diese Voraussetzung müssen wir gelten lassen, obgleich sie auf keine Weise, weder durch Wahrnehmung noch durch schliessendes Beweisen, sichergestellt werden kann. Wir müssen uns damit zufriedengeben, dass sie unentbehrlich ist und sich gut bewährt. Für die Idealwissenschaften kommt diese Erkenntnisgrundlage, die nur von Realem spricht, nicht in Betracht. Auch sie ist also durchaus charakteristisch für die Realwissenschaften und zeigt so deren einschneidenden Unterschied gegenüber den Idealwissenschaften. Entsprechendes gibt auch vom Kausalprinzip, das sich auf die allgemeinere Gesetzmässigkeitsvoraussetzung stützt.

Der radikale Unterschied zwischen Ideal- und Realwissenschaften macht sich endlich auch in den Erkenntnismethoden geltend. Wir können die Soseinswahrnehmung selbst bereits als eine Methode der Idealwissenschaften bezeichnen, als diejenige nämlich, die diesen ihre synthetischen Erkenntnisgrundlagen liefert. Sie bietet uns gesicherte allgemeine Urteile, z.B. mathematische Axiome, auf die sich dann das deduktive Schliessen und Beweisen als Schluss-Methode der Idealwissenschaften stützen kann. So sehen wir, dass in der reinen Mathematik die Deduktion als schliessende Erkenntnismethode herrscht.

Wie steht es nun mit den Methoden der Realwissenschaften? Zunächst können wir die schlichte oder empirische Wahrnehmung als Methode der Realwissenschaften anführen, die diesen zahllose schlichte Wahrnehmungsurteile als für sie charakteristische Erkenntnisgrundlagen liefert. Die schlichte Wahrnehmung aber ist auf das gegenwärtige Bewusstsein des Wahrnehmenden beschränkt. Nehmen wir die Voraussetzung des Erinnerungsvertrauens hinzu, so wird unserem Erkennen auch der Bereich unseres eigenen früheren Bewusstseins zugänglich. Wollen wir jedoch von diesem für die Realwissenschaften viel zu engen Gebiet des eigenen gegenwärtigen und vergangenen Bewusstseins aus weiter vordringen, so brauchen wir das erweiterende oder induktive Schliessen, d.h. die Analogie- und Induktionsschlüsse, welche uns vom Wahrgenommenen zum Nicht-Wahrgenommenen führen, und welche sich auf die Regelmässigkeits- bzw. Gesetzmässigkeitsvoraussetzung (und oft speziell auf das Kausalprinzip) stützen. Diese induktiven Schlüsse eröffnen unserem Realerkennen die Zukunft, ferner jene Gebiete der Vergangenheit, die unserer Erinnerung unzugänglich sind, ferner die Aussenwelt ausserhalb unseres Bewusstseins und das Fremdseelische (d.h. das Seelische in Mitmenschen usw.). So ist das von der Wahrnehmung, der Erfahrung ausgehende induktive Schliessen die typische schliessende Erkenntnismethode der Realwissenschaften. Es ist fast selbstverständlich, dass diese ausserdem das deduktive Schliessen anwenden können und müssen.

Also in Bezug auf ihre Gegenstände, Erkenntnisgrundlagen und Methoden, kurz in den wesentlichen Punkten, weisen Ideal- und Realwissenschaften die einschneidendsten Unterschiede auf. Trotzdem bleibt die Kontinuität bestehen, welche alle Wissenschaften zu einer grossen Einheit verbindet. Und zwar verknüpfen nicht nur das Gemeinsame in der Zielsetzung, nämlich das Streben nach systematischer Erkenntnis, sowie manche formalen Züge ihres Aufbaus Ideal- und Realwissenschaften; es bestehen interdies enge Zusammenhänge zwischen bestimmten idealwissenschaftlichen und realwissenschaftlichen Disziplinen, z.B. zwischen Mathematik und Physik. Diese Zusammenhänge beruhen darauf, dass Soseinsarten, welche von Idealwissenschaften erforscht werden, zu Gegenständen von Realwissenschaften werden können, wenn sie irgendwo in der Wirklichkeit vorkommen; z.B. gehört das Oktaeder als Idealobjekt in die reine Mathematik, aber als real existierende Kristallform bildet es einen Gegenstand der Naturwissenschaften, der Kristallographie.

Wir wollen nun einen Schritt weiter gehen und nach der „natürlichen" Einteilung der Realwissenschaften fragen. Wenn wir diese zunächst nach ihren Erkenntnisgegenständen einteilen wollen, so bietet sich uns als einschneidendste Unterscheidung die von seelisch-geistigen und von körperlichen Gegenständen an, der dann die Gegenüberstellung von Geisteswissenschaften und Naturwissenschaften entspricht. Zu ersteren gehören Psychologie, Philologie, Geschichte, Staats- und Wirtschaftswissenschaft usw. Man hat gemeint, der Gegensatz von Seelischem und Körperlichem habe durch monistisch-metaphysische Tendenzen seine Bedeutung verloren. Wie man ihn aber auch vom metaphysischen Standpunkte aus deuten mag, für die nicht-metaphysischen Realwissenschaften, für Geistes- und Naturwissenschaften, bleibt dieser Gegensatz durchaus bestehen.

Ihm entspricht nun bei den letzten Erkenntnisgrundlagen die Gegenüberstellung von Wahrnehmungsurteilen über jederlei Bewusstseinstatsachen und von Wahrnehmungsurteilen speziell über sinnliche Bewusstseinstatsachen. Die ersteren Wahrnehmungsurteile sind, erkenntnistheoretisch und logisch betrachtet, die allerersten Ausgangspunkte und Grundlagen der Erkenntnis des Seelisch-Geistigen und also der Geisteswissenschaften; die Wahrnehmungsurteile speziell über sinnliche Bewusstseinstatsachen sind die allerersten Ausgangspunkte der Erkenntnis des Körperlichen und also der Naturwissenschaften.

Dieser Gegenüberstellung der Wahrnehmungsurteile korrespondiert endlich bei den Methoden der Gegensatz von Selbst- und Sinneswahrnehmung. Von Selbstwahrnehmungsergebnissen geht das induktive (und das ihm zugehörige analogische) Schliessen in den Geisteswissenschaften, von der Sinneswahrnehmung das induktive Schliessen in den Naturwissenschaften aus. Fremdseelisches (in unseren Mitmenschen usw.), das wir nie unmittelbar wahrnehmen, erkennen wir zunächst auf Grund seiner ,,physischen Zeichen", wozu Sinnesorgane, Ausdrucksbewegungen, Sprechen, Arbeiten, Schriftstücke, Kunstwerke, kurz alle physischen Dinge, Vorgänge usw. gehören, die mit seelischen Realitäten regel- oder gesetzmässig zusammenhängen und daher ein analogisch-induktives Schliessen auf diese ermöglichen. Sind wir mit Hilfe dieser ,,Methode der physischen Zeichen" einmal zur Erkenntnis vom Fremdseelischen gelangt, so können wir auf Grund unserer Kenntnis regel- oder gesetzmässiger seelischer Zusammenhänge fernerhin von den erkannten fremdseelischen Realitäten auf weiteres Fremdseelisches schliessen. So können wir von den sinnlich wahrgenommenen Worten eines Menschen nach der ,,Methode der physischen Zeichen" auf reine Gedanken schliessen; und diese Gedanken ermöglichen dann vielleicht ein Erschliessen anderer Gedanken oder Wünsche, die mit den ersteren regelmässig zusammenzuhängen pflegen. Allerdings braucht unser Erkennen die angedeuteten Schlüsse nicht wirklich durchzuführen; an ihre Stelle treten abkürzende Apperzeptions-, Reproduktions- und Einfühlungsprozesse. Die logische Rechtfertigung der Erkenntnis des Fremdseelischen aber fordert die angedeuteten Methoden.

Nach dem Gesagten unterscheiden sich auch die Geistes und die Naturwissenschaften wie in Bezug auf ihre Gegenstände, so auch in Bezug auf Erkenntnisgrundlagen und Methoden. Aber auch hier besteht trotz trennender Unterschiede doch auch wieder Verbindung und Zusammenhang. Und zwar sind Geistes- und Naturwissenschaften nicht nur durch die gemeinsamen Züge verbunden, die diese wie jene zu Realwissenschaften machen. Alles Seelisch-Geistige ist in unserer Erfahrung an Körperliches gebunden. Der Mensch, dessen Seelen- und Geistesleben die Geisteswissenschaften in erster Linie behandeln, ist ein psychophysisches Wesen und verbindet so die Reiche des Seelisch-Geistigen und der Natur. So wird der Vertreter der Geisteswissenschaften immer wieder zur Berücksichtigung physischer, der Naturforscher, z.B. der Sinnes- oder der Gehirnphysiologe, zur Betrachtung seelischer Tatsachen gedrängt.

Endlich aber verbindet die Metaphysik, die Gesamtwirklichkeitswissenschaft, Geistes- und Naturwissenschaften durch ihren unser Realerkennen krönenden Überbau. Sie zielt auf wissenschaftliche Weltanschauung, auf Erkenntnis des Gesamtwirklichen, während die Einzel- oder Partialrealwissenschaften nur Teilgebiete der Gesamtwirklichkeit als solche erforschen. Um das Gesamtwirkliche zu erkennen, muss sich die Metaphysik freilich auch mit seinen Teilen und Teilgebieten beschäftigen; dabei kann sie sich auf die Ergebnisse der Partialrealwissenschaften, der Geistes- und Naturwissenschaften stützen etwa auf die Elektronen- und Atomtheorie, die Relativitätstheorie, das Energieerhaltungs- und -entwertungsprinzip, die biologische Teleologie und Entwicklungslehre, um nur einige Beispiele metaphysisch bedeutsamer naturwissenschaftlicher Resultate und Hypothesen zu nennen, denen geisteswissenschaftliche an die Seite zu stellen wären. Die Metaphysik als Gesamtrealwissenschaft rückt aber die von den Geistes- und Naturwissenschaften behandelten Wirklichkeitsteile in neue Beleuchtung, indem sie dieselben, z.B. das anorganische Leben, die Seele, die Geschichte, die Kultur, unter dem Gesichtspunkte der Gesamtwirklichkeit betrachtet. So ergeben sich etwa eine Metaphysik des Anorganischen, des Lebens, der Seele, der Geschichte usw., die aber alle der Metaphysik schlechthin, der Gesamtwirklichkeitswissenschaft zugehören und dienen.

Wie der Gegenstand der Metaphysik, das Gesamtwirkliche, die Gegenstände der Geistes- und Naturwissenschaften allesamt einschliesst und vereint, so wird die Metaphysik auch die Erkenntnisgrundlagen und Methoden der Geistes- und der Naturwissenschaften für ihr umfassendes Erkenntnisziel verbinden. Sie wird sich in der Metaphysik der Natur z.B. auf Ergebnisse der Sinneswahrnehmung, in der Metaphysik des Seelischen auf Ergebnisse der Selbstwahrnehmung und der Methode der physischen Zeichen stützen. Jedenfalls wird sie von der Erfahrung, der schlichten Wahrnehmung, ausgehen müssen; denn ohne diese kommt unser Erkennen an die Wirklichkeit überhaupt nicht heran. Die Erforschung des Gesamtwirklichen aber muss das enge Gebiet der schlichten Wahrnehmung, der reinen Erfahrung, weit überschreiten und braucht dazu die Voraussetzungen des Erinnerungsvertrauens, und der Regel- bzw. Gesetzmässigkeit des Wirklichen, kurz die induktive Methode, sowie die Soseinswahrnehmung.

Nur erwähnt sei zum Schluss, dass die Metaphysik das Gesamtwirkliche und seinen Urgrund, seinen Ablauf, sein Ziel usw. auch zu bewerten strebt und dadurch in Verbindung mit den wertenden Wissenschaften, der allgemeinen Werttheorie, Ethik usw. tritt. So verknüpft sie auch theoretische und praktische Philosophie, wie sie die verwirrende und zersplitterte Vielheit der Geistes- und Naturwissenschaften durch die Einheit ihrer Gesamtwirklichkeits-Auffassung verbindet und krönt.

MIND AND NEAR-MIND

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THE system of the sciences can hardly be called complete without a science of the mind. Its place in that system my honored colleagues have clearly pointed out. Yet psychology remains in the scientific community an uncomfortable and difficult neighbor. The highway to its door, from physics, by way of biology, appears an unbroken continuum only to the unwary or the sanguine; while the other path, that from logic, is at present only a set of hopeful office-sketches. My inquiry will address itself to the question whether mind can successfully be made a theme of science, and what the status of such a science among the other sciences may be.

My thesis is that the effort to create a science of the mind is a necessary effort: we cannot give it up, and on the whole it has not been unfruitful. But the extant science or sciences of mind have presented us not the mind itself, but substitutes for mind, — systems of objects which are equivalent to mind only for certain restricted purposes, — Near-minds, we may call them. The true science of mind will supply the lacking continuity among the sciences.

I

Ever since man became interested in himself — that is to say, even since he became man — there has been a body of lore about human nature. And probably there has been from very early times a body of protest against this lore, first of all in the form of counter-dogmas. Man is by nature good: man is by nature evil; conflicting proverbs of this sort represent less hostile psychologies than reminders that it is easier to tell a half truth about human nature than the whole truth.

It is as if men had long been dimly aware of a paradox in the case. Self-knowledge must be possible, else there would be no such interest. Yet there is something peculiarly elusive about it, as if whatever you say needs to be corrected.

This paradox comes to full evidence in the modern era. Beginning as it did in a burst of self-consciousness, it was bound to be a psychological era. It was bound to apply to its quest for self-knowledge the methods that had proved successful in other fields.

Some Spinoza was bound to set up a physics or geometry of the passions. The experimental method was bound to beget an empirical psycho-physics. And no one, I think, can trace this stretch of history and doubt the success of these efforts: we have learned through them a great deal about human nature.

But this advance has gone on under a rain of protest, derived curiously enough from those very thinkers who gave modern psychology its original impulse. For while Cartesians and empiricists alike believed that there must be a science of the mind on the pattern of the other sciences, they also agreed on the strangely incongruous proposition that mind and matter are profoundly distinct and disparate in nature. How long could this second judgment live in complete harmony with the first?

It was the idealists who chiefly exploited the difficulty, asserting with Berkeley that we can have no ideas of spirits, but only "notions"; or, with Kant and the transcendentalists after him, that the subject of knowledge can never be an object. These were *a priori* objections. It was quite possible for a flourishing psychology to make light of them. If self-knowledge is in some sense impossible, yet here, in some other sense, is a body of usable and valid self-knowledge: the circumstance that it is "merely empirical" can hardly disqualify it, so long as it is empirically true.

Nevertheless, the haunting conviction persists that there is something radically peculiar about self-knowledge; and that because of this, our scientific psychology fails in some essential, though neither the vitalists nor the other dualists nor Bergson nor the idealists have precisely diagnosed the trouble. This uneasiness shapes itself into a growing protest which an empirical science can less easily ignore; for it is an empirical protest. Psychology professes to give us a true description of human nature, a realistic portrait; and human nature, on the ground of its own self-observation, shows signs of disowning the likeness! (It would be better to speak of likenesses; for psychology is many.) One in particular, the psycho-physical scheme of stimulus and response, after being given a respectful, even deferential viewing, is soberly judged to be a caricature of the human mind. The rejection, in common judgment, is intuitive, but decisive. Let me illustrate.

A Hindu scholar, who was recently pointing out to a group of our students certain differences between Oriental and Western thought, was asked whether the mystical trait in Hindu metaphysics might not be due to the enervating influence of a hot climate. There was a slightly delayed response and a certain added vigor in the reply:

"In so far as mysticism is true, it is true in all countries, even in America." What was the meaning of that prompt repudiation of a simple and banal psychological theorem? Why does the innocent suggestion that *your* doctrine may be a function of the climate become outrageous when it is *my* doctrine that is so explained?

We are not studying emotions today: we are studying the logic of the sciences. But emotions have their logic; and our logical inquiries will be promoted, I believe, not delayed, if we give a careful hearing to the judgments upon which such emotional protests depend. In this case, the judgment is a common and a simple judgment.

II

Most crudely stated, it is that *causes are not reasons, and reasons are not causes*. And since mental process is at least partly rational, no system of causes such as a physical-psychology aims to establish can be equivalent to mind. Two series of events, one of which is purely causal, the other of which has an admixture of reason, can neither be congruent with each other nor parallel with each other. A causal system can at best be but a Near-mind.

No one doubts that causes work on the human organism, and account for much in human behavior. This is palpably the case in our errors, mistakes, stupidities, slips of the tongue, unreasonable fears, and prejudices. It is here that the causal psychology is peculiarly at home: it is here also that the distinction between causes and reasons is most evident. Freud and the behaviorists vie with each other in accounting for the abnormal and foolish aspects of human conduct. If I make an error in calculation, I may properly consult the psychologist; if I reach the right conclusion, the result is no function of vigor or fatigue, of hot or cold climate, of distraction or repressed impulses. That which is no function of variable antecedents cannot be the effect of a cause. There are no causes for going right; there are no reasons for going wrong.

It would perhaps be an exaggeration to define a causal psychology as the science of human fallibility. For, after all, learning by trial and error is learning to go right, and it is partly a causal process. Successful adaptation is to some extent an effect, is it not, of the play of experience on an organism fortunately fitted to learn? Must we insist on the disparity of causes and reasons when they so clearly run in the same grooves, and every reaction may be described, as Charles Peirce suggested, as the embodiment of a syllogism? "Apples are good to eat; this is an apple: ergo. . . ." But observe that as a caused reaction, the behavior is released by a physical event proceeding from the apple, while as a mental event it is released by a judgment; and the success of the physical effect does not guarantee the truth of the judgment. A causal success may still be a rational failure. Thus, if a child has not learned to distinguish between a ripe apple and an unripe apple, its response to particular apples may be by good chance wholly prosperous. The subject does not know that he does not know the true criterion of edibility; the knowledge of his ignorance, the distinctive element of reason which would make his behavior experimental rather than mechanically decisive, is lacking. An accidental success is a logical error, and a mechanical adaptation is an accidental success.

But there is more in the intuitive repudiation of causal psychology than this simple distinction between causes and reasons. It means in part this: That, however true a causal law of human behavior may have been at the time of its discovery, the discovery and statement of a causal principle in psychology *has a certain tendency to make itself untrue*. The discovery of a law of physics has no tendency to modify the phenomenon. The discovery of a law of mental sequence immediately changes the conditions of that sequence.

Thus, it is possible that my opinions *are* functions of the climate. But suppose that I discover, or am told, that this is the case. Then either those opinions cease to be my opinions; for I spontaneously try to correct them by introducing a factor of relativity-to-climate. Or else I reflect that the opinion that opinions are a function of climate may be a function of the climate, and I introduce my correction into the alleged law. In either case, the law as stated ceases to be valid.

Or consider the production of "dramatic effects." A successful causal psychology should be able to analyze their conditions and make it possible for playwrights and actors to produce them at will. Hundreds of second-rate writers and actors are today trying to discover and utilize these psychological prescriptions. But as the public senses the effort, the effect fails. One who recognizes the "sob-stuff" is no longer able to sob, however he may wish to do so. Knowing the causal rule invalidates its action.

In many ways today this truth is manifest — in education, diplomacy, industrial management, politics, commerce, advertising, the cultivation of religion — that a causal psychology defeats itself in its proposed "application," because it falsifies itself in becoming known. The causal management of men must always proceed in secret: that is to say, it must ultimately be given up.

We have been dealing, so far, with common judgments. We have now to ask, what is their logical essence?

It is, I believe, that *the causal order of events becomes abstract as it becomes a part of the mental order*. In a field of like entities, a physical force is not an abstraction. The parallelogram of forces is capable of telling all the truth there is to be known in that context. But when a physical sequence becomes an ingredient of a mental process the calculus of vectors is no longer sufficient to describe the event. It has *become* abstract. It can neither determine nor describe what happens, for the *what* of what happens is fixed by the judging mind. Again, I must illustrate.

When the child is burned by the candle flame, it avoids something thereafter; but what does it avoid? Is it candle flames, or flames in general? Is it approach to the flame, or only grasping the flame, that is avoided? There is no physical answer to these questions. What is avoided depends on what the child's mind has judged to be the essence of the source of harm. Whether the pain-giving property of a seized candle-light implies the pain-giving qualities of a touched lamp-chimney or of a black-hot stove depends on what genus that mind has made of its first enemy. In what happens within that mind, the physical sequence has become an abstraction.

Let us give this principle of becoming-abstract a more schematic statement.

Let us agree that the mind as knower is related in the same way, homogeneously, to all of the objects which at any given moment it contemplates. For the nonce it makes no difference to us what that elusive relation of knowing and being-known may be.

It follows at once that the mind *cannot be exclusively identified with any one member* of any series or class of objects which it contemplates as a whole. And from this, again, it cannot be identified exclusively with the *last member* of any series which it observes.

If it observes a series of events in time, it cannot be exclusively identified with the last of these events, i.e., the present event. It is *with* the entire series. If this series of events is a causal series — let us say, an evolutionary series, debouching in the human self as an end-product, then, the human self which observes that series cannot be simply that end-product. In observing itself as an effect, it has thereupon ceased to be merely that effect. Thus, if I say, I observe that I am what heredity has made me, I lie, in so far as I intend this to be the whole relevant truth. For the thing which is there added to the moulding power of heredity, namely, my observation of that power, — the thing which is absent from the physical sequence as such, — may be precisely the fulcrum of my release. Upon being discovered, the causal series has not lost its character, but it has become abstract.

An important special case of this principle is to be noted when the class of objects observed is a class of *spaces.*

Commonly, when we use the word space in the plural (as when we speak of inter-stellar spaces) we mean portions of one space. Kant maintained that this is the only legitimate use of the plural; since space itself is infinite and entire, there can be but one total space which absorbs and places all partial spaces. Modern mathematics knows another use for this plural, namely, to indicate various definable types of space, without regard to their actuality. And Minkowski, in his celebrated memoir of 1908, proposed to introduce this plural into physical theory in still another sense, — that of the manifold of values which can be assigned to the three parameters of space in describing the given four-dimensional manifold of events.[1]

But there is another sense in which space has a legitimate plural, a sense more radical than these. In precisely the sense in which space may be regarded as unbounded and total, there may be *more than one space* for the mind's contemplation.

Let me call to mind that any given fragment of space invites us to explore the region beyond it until we have mentally constructed a total space. That total space may be identified as the space of that fragment. Thus, we may speak of the space of a given picture, understanding thereby not the fragment cut out by the framed-vista, but the whole which would be got by continuing all its lines forever. In the same way, we may speak of the space of our bodies and their environment, the space of actual nature. And my point is that the space of a picture or of a dream need not be identical with the space of nature. The test is simple. Between every two positions of a given space there is a line: that is, they are related by distance and direction, — it is possible to trace a continuous journey from one to the other. But between the tree-top in the imaginary world of the picture and the floor of the room in which it is hung there is neither distance nor direction: an expanding sphere from the tree-top would never intersect an expanding sphere from any point in the room. Each space is complete, unbounded, unitary: but they are two. And the mind can contemplate both at once without regarding the one as a province within the other.

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[1] The conception of a plurality of spaces has been considered by Professor Whitehead, and also, I am told, by Professor Broad. I regret that I have not as yet had the privilege of seeing these discussions.

I do not say that the mind regards both as actual: it may be — though I doubt it — that the privilege of actuality is unique. But the mind can contemplate both at once. And it follows that the mind cannot be exclusively identified with either space, and hence not with the events within it. But since nature is a system of events determining (in our present sense) a single space-time order, the mind cannot be a set of events within nature. The mind with which natural science can deal is but a Near-mind.

III

There are various other Near-minds afloat in current psychology, some of which, recognizing that reasons are not causes, begin the picture in the realm of reason, and make psychology continuous not with physics but with logic.

Such a view of mind is that developed in masterly outline by the lamented Bernard Bosanquet. To bring it graphically before us, let us adopt his illustration of the able manager, skilled in fitting the right man to the right place. Bosanquet represents him as describing his own mental process: "The difficulty was so-and-so, and it just occurred to me that X was the very man whose special capacity was needed to deal with it." In this process of "occurring to" the mind, personal effort, as Bosanquet notes, is neither evident nor availing. "We cannot by attention command the connections we desire." The activity which some ascribe to consciousness is resolved into thought, and thought, in turn, is "something which goes its own way, and has its own laws of operation": in a fertile mind, what we discover is that situations develop themselves, and reach out for their own proper completion. What we call mental action is the "self-assertion of an object, nourishing itself out of the psychical material it meets with": it is "reality completing itself in and through the mind." The result is less a personal achievement than an evidence of that "seamless continuity by which the individual passes into the universe."

It is but a step from this description to an analysis of mind which, without ascribing it bodily to any one thinker, we find hints of in various of the neo-realists. For if we hesitate to ascribe mental process to an activity of the mind's own, the process becomes a grouping of contents according to laws of their own realm. These contents thus acquire a certain primacy in the event: it is their assemblage which constitutes the mind. They themselves, both sensa and universals, take on an independent existence or subsistence apart from the mind; and now and then appear, in their changeless identity, as ingredients of the actual mental event.

This attempt to assemble the mind, by selection or otherwise, from a world of independent logical or neutral entities must be pronounced an unqualified failure, if only because the world from which it is assembled is devoid of meaning. Note what this world must contain. It must contain all such eternal essences, and all their possible propositional relations, true and false, significant and insignificant, wise and foolish. All conceivable deductions are there, already executed. It is an eternal reservoir of all potential thought and all potential being. But I fear that the phrase, "all the meanings," is the perfect model of a meaningless phrase. A musician's repertory consists of a finite number of musical works which he can render: add to this repertory all the other possible combinations of notes and you destroy it. You have returned all the statues to the quarry and lost them in the original rock. This logical world of all the meanings is but another term for chaos. It is no reservoir of potential being: it is the barren infinitude of meaningless illation.

There is no world of essences. Thinking must be thought; reasoning must be reasoned. If pure space is nothing, so also is pure reason nothing without the actualizing activity of the thinker. Slight as it is, the step which the realistic analysis takes beyond Bosanquet is a step into the abyss.

But in so far as Bosanquet tends to ascribe this reasoning activity to a universal subject, while the mind with which psychology is concerned remains a relatively inactive participant in the life of Reason, his view of mind shares with the realistic view another defect. It lacks depth. It is to the self what a mural painting is to the solid distance. Conceptions of mind which cannot discover the activity and unity of the finite self might well be characterized as *mural conceptions*, a variety of Near-mind, decorative but lifeless substitutes for the reality.

We must restore to our accounts of mind the boundless depth of selfhood, its vast otherness from this surface-play of content. We need not accept uncritically that mother of modern Near-minds, the subconscious, to remember that it has something to contribute to our sense of the dimensions of the human self.

IV

But enough of these negations. Let us turn to our conception of what the mind, in contrast to these Near-minds, is.

It has often been said that the mind is an activity of synthesis or grasping-together. It has also been said that the mind is the principle of synthesis of the great oppositions among the categories, such as the one and the many, the limited and the unlimited. These propositions have a certain obvious truth; but the conception has remained infertile, largely because, put in this indiscriminate way, it leaves the mind uncharacterized, a small and unemployable version of the idea of the absolute.

But suppose we consider not synthesis in general, but certain particular and salient syntheses. The mind holds together, for example, past, present, and future; it holds together fact and value; it holds together the actual and the possible. Take these three syntheses by themselves. Every object of physical nature belongs to one side of these pairs, not to both sides: every such object is an actual present fact. The mind, then, differs from every object of nature in being in addition a hold upon the possible, the future, the valuable, — or, to put these together, upon possible future value. Its essential activity is to bring possible future value into connection with actual present fact; and my proposition is that it is the *only agency for doing this*. Mind is the only organ for making future possibility actual.

At the outset, this seems somewhat preposterous; for we often speak of possibility in nature. But the possible in nature means either the sort of thing which occasionally comes to pass (as when we say, it is possible that seal may live under the Polar ice) or which it lies in the gamut of natural happening to bring about (as when we conceive it possible that the submerged Atlantis should reëmerge). The possible is simply a genus of happening not excluded by any known law, whose particularization we do not know enough to foretell. It always has reference either to human action or to human ignorance. In the strict natural order, only one set of events is possible, namely, that which is going to happen. In brief, *only the necessary is possible*, and the category of the possible has no objective actuality.

Now possibility means something distinct from necessity, and something distinct also from the purely unreal: the possible cannot be nothing, — it must have some basis in the actual. It can gain no such status by being referred to a world of eternal essences. Not all the essences are possible in any given world; hence, to be an essence is one thing, to be an actual possibility quite another. There is only one circumstance known to us under which a possible, not a necessity, tends to become actual, and that is when it appears as an object of wish to some mind. When some mind conceives an essence as desirable, it becomes an actual possibility: it not only has a foothold in actuality as an actually conceived element of being, but it has a veritable nisus toward being, such as the world of pure essences cannot claim. As a mere universal, nothing is possible. As a promise of value to an actual self, anything may be possible. The veritable possibility of any idea depends upon its being actually *thought of*.

Conversely, we may say that this is the characteristic activity of the mind, — conceiving a possibility and bringing it to birth.

A psychology which finds the essence of the mind in desire or aversion toward existent stimuli wholly misses this point. Mind is directed primarily toward the non-existent essence, — the thing hoped-for but not seen: and in the desire or aversion toward this conceived essence there is included the rational *judgment of attainableness*, which marks the transition from desire to hope, anxiety, or dread. Hope is the mother of purpose; a given hope may give rise to many purposes. Hence, while the matured self may well be defined (with Royce) as a purpose, the primitive background of self is rather of the nature of hope. Existence, to a self, means a perception of good and evil as possibilities; and a building, out of many partial goods, of a conception of a good which, as related specifically to my capacity for enjoyment, is *my good*. The unity of that good is the objective counterpart of the unity of the self; and the persistence of the self carries with it a persistent hold upon the possibility of that good, as what I am destined to achieve.

In this relation to the possible good we have the locus of that activity which is so elusive to introspection, and at the same time of that quantitative aspect of selfhood which so many modern thinkers, including Hegel, Natorp, and Bergson, feel constrained to disavow.

For the self holds to its vision of possible good with a *variable tenacity or insistence*, which is the essence of its will, that is to say, of its being. The capable manager above referred to may not, in the course of a day, discover more needs nor see more men capable of filling those needs than the incapable manager. But the difference is that the sight of a man in the capable mind falls upon a powerful current of affirmation, — "You belong somewhere"; and the sight of a need strikes into a strong current of belief to the effect, "This is to be met." The poorer capacity has the same "interests," but the current of confidence in the achievable good is languid: the essential activity of the self is feeble.

Resource is thus a direct product of the tension of hope. And this tension, which is non-empirical, is the substance of the will or activity of the self, and constitutes what we call the "depth" of selfhood.

Two things are apparent at once in regard to this activity. (1) While it is subject to no empirical measure or laboratory test, it *makes a difference* in the course of events. It decides, for example, whether in the manager's mind the right man shall, in fact, find the right place. Where these world-lines cross, there is an event: and the degree of hope may make the difference between their intersection and their non-intersection. (2) It is the locus of freedom; for it is the self's determination of its own degree of being.

In the free action of mind there is a genuine addition to being. If the world of the possible were that alleged eternal and infinite reservoir of essences, there could be no genuine creation or novelty: action would be limited to marking out certain preëxistent ideas as candidates for being. But when we see that the genuinely possible is only what is conceived possible, every hitherto unthought-of possibility appears as an absolute creation. The mind adds to the actual by first adding to the possible. In this view of things, art acquires a new importance for the constitution of the future world; — it is one of the major avenues of metaphysical birth.

V

We have described what the mind is in terms of an activity which we term, for lack of better words, a tension of hope. We have said that this activity eludes scientific measure, because it lies not within the world of nature, but plies between nature and the world of actual possibility. Have we then simply renewed the ancient chasm, and once more denied the continuity of the sciences?

No. We have only said in another way what has often been said in the history of philosophy, that to discover the continuity of the sciences we must proceed from the concrete to the abstract, not from the abstract to the concrete. Abstractions are discontinuous; and a classification of abstractions is simply an ordering of discrete objects. If you stand on the plain and look toward a range of mountains one contour stands sharply separate from the contour behind it: the mountains are named from below. Look down on the range from the air, and you recognize the binding masses at their bases. It is the concrete which contains all the abstractions together with their relating roots.

It is this passage from the concrete to the abstract which Professor Whitehead proposes in his *Science and the Modern World*. Biology, he holds, cannot be considered a chapter in physics; but physics may be regarded as a chapter in a generalized biology. If you establish the categories of your biology, you find that you have already by implication established the categories of your physics; the latter can be deduced from the former.

Now this is in principle precisely what the classical idealists were attempting to do, under the general head of "deduction of the categories." Only, their concrete point of beginning was not life, but mind. And with this point of beginning, their attempt was to sweep into their net not alone biology and physics, but the logical sciences as well. The principle of their "deduction" was that the positing of mind carries with it the positing of divisible non-mind, of space, time, sense-quale, thing, causality, and the like. Had they been fortunate enough to have before them Professor Whitehead's deduction of physics, they might well have incorporated it into their scheme with gratitude. And they might have commented on his enterprise that because he had begun not with mind, but only with Near-mind, that is, with something less than the most concrete of beings, he was in all consistency obliged to eke out his universe with another Near-mind, in the shape of his world of eternal possibles.

My own impression of these classical deductions, from Kant and Fichte to Royce and Gentile, is that they are not in detail successful, and that for several reasons. They have lacked (with the exception of Royce) that careful precision in the analysis of the scientific categories, which is so eminent a characteristic of Professor Whitehead's work. A logical reduction of categories must precede a satisfactory deduction. Again, they have assumed too readily that the world we live in is, in its main categories, a necessary world. Finding space, for example, a fundamental characteristic of this world of nature, they have tried to show that selfhood requires the space-form of experience. But to me their labors here are lamentably unconvincing: I can see that selfhood requires manifoldness, but not (with Gentile) that manifoldness must necessarily be spatial rather than tonal or otherwise. It is at least conceivable that space is not necessary to selfhood, but arises out of the realm of actual possibility, and, therefore, evades that form of deduction. Finally, they have not reckoned enough with the long labor of understanding the self. True as it is that the abstract must be understood from the concrete, we cannot carry out the deduction until the concrete itself is fully known.

The conclusion is that the deduction of the categories from selfhood is a valid and necessary aim, always premature in its detailed execution. In the work of such a thinker as Hegel, it becomes a kind of technical poetry. It is not to be discarded on that account. On the contrary, this imaginative exuberance which Hegel mistook for dialectic may be an unwitting contribution to another alliance, not less important for philosophy than the alliance with science, namely, that with the poet and the prophet.

Meantime, the thing of primary importance for us is to recognize the inescapable validity of the problem of "deducing the categories." Mind is the most concrete entity we can ever discover, for the discovery of an entity supposedly more concrete would reveal the discoverer as one stage more concrete still. This deduction, furthermore, a kind of metaphysical psychology, is the only satisfactory science of the mind; and the only science that can cherish the ideal of becoming a perfect science, for it is the only one that can hope to understand its own data. The several Near-minds of the scientific psychologies have their worth and their actuality; but they have life only as organs of mind.

Finally, an admonition for the philosopher. It is not unimportant what any man thinks of mind: it is not unimportant, therefore, what philosophy represents mind to be. We dare not wholly ignore what the mystics have told us. To regard the mind as the creative principle, they say, is not an hypothesis among others in metaphysics, but the primary certitude of experience.

Discussion of the papers in the General Session of Division B was led by E. G. Spaulding (Princeton).

II. SECTIONS OF DIVISION B

SECTION 1

Time: Tuesday, September 14, 9.30 A.M.
Place: Standish Hall Common Room
Subject: The Status and Relations of Sensa and Scientific Objects
Chairmen: E. A. Singer, Jr., Pennsylvania
M. T. McClure, Illinois

EXPERIMENT AND METAPHYSICS

Edgar Wind
(*North Carolina*)

I

THERE is a paradox inherent in physical inquiry. The formulation of physical laws is based on measurements carried out within the field of physics. But measurements carried out with physical instruments are, themselves, subject to physical laws. It seems, then, that the possibility of controlling the accuracy of experiments presupposes the knowledge of those laws which the experiments intend to test, and the physicist's method of inference thus seems to move in a circle. The laws which he discovers cannot claim to be universal unless the measurement has been accurate. But the measurement cannot claim to be accurate unless it is based on the knowledge of universal laws.

In order to decide whether this dilemma is fictitious or real we must determine more precisely what the claim of accuracy involves. For this purpose it is necessary to define the various elements of which a measurement is composed. As far as we can see, there are three such components to be distinguished:

1. The presupposition of a system of axioms and theorems, defining the terms of measurement and exhibiting the ideal rules which govern their composition (e.g., the Euclidean system of geometry).

2. The choice of individual physical objects which represent the terms of measurement in the factual world and thus serve as measuring instruments (e.g., the choice of measuring rods of some kind of material which are understood to represent straight lines in the sense of Euclid).

3. The application of these measuring instruments to the objects which are to be measured (e.g., the act by which a certain measuring rod is superimposed upon another physical body).

Now it is obvious that the last mentioned element, the act of measuring, is, itself, a physical event, the outcome of which is a matter of purely empirical observation. The two bodies involved either coincide or do not coincide. The coincidence between their respective points can be stated — in the language of Leibniz — as a *vérité de fait*.

On the other hand, it is equally obvious that the first mentioned element, the geometrical system, can be exhibited only as a matter of pure axiomatic reasoning. The system presented is either logically consistent or inconsistent. Its theorems must be intelligible as *vérités de raison*.

It follows, then, that, as long as we consider these two elements independently of each other (on the one hand the demonstration of geometrical theorems, on the other the observation of empirical coincidences), neither of them contains any methodical puzzles. The claim of accuracy refers in the one case to the consistency of demonstration, in the other to the correctness of observation, and both can be controlled within their respective fields. What makes the situation problematic is merely the relation which we must establish between the two if we wish to qualify physical objects as measuring instruments. To the bodies which we know only by empirical observation we must attribute the geometrical properties which we have developed by axiomatic demonstration. It is at this point that the problem of accuracy reveals its paradoxical meaning. For the choice of instruments can neither be justified by pure reasoning nor can it be determined by mere observation. It can be defined only as an act of symbolic representation; which is to say that it is both arbitrary and purposive. It is arbitrary inasmuch as it imposes upon a physical body the function of representing a metrical scheme. It is purposive because, owing to this procedure, the physical coincidences between this body and other bodies become indications of metrical correspondences. The goal is to express these correspondences in the form of equations, so that the collection of *vérités de fait* becomes intelligible in terms of a system of *vérités de raison*. But here the question arises: how can you be certain that the equations which express correspondences on the basis of coincidences will be in harmony with the equations which have been deduced from geometrical axioms?

The answer lies in the experimental method.

II

What is it that an experiment intends to test? Certainly, it is not meant to decide whether the mathematical demonstration which precedes the experiment has been mathematically consistent or not, for a test of that kind could be carried on only on mathematical grounds. Neither can it serve to control whether the outcome of the measurement has been correctly observed or not, for this observation is supposed to answer, not to present, the problem. What really is tested is the physical presupposition on the ground of which the outcome of the measurement has been demonstrated in geometrical terms. This physical presupposition, however, is the very basis on which the measuring instrument has been selected. If the outcome of the experiment is, hence, the one that was predicted, if the geometrical demonstration proves to be physically valid, it follows not only that the corresponding physical law must be accepted as actually effective, but also that the construction of the measuring instrument must be considered correct. We thus cannot escape the conclusion that the ultimate purpose of the experiment is to test its own presupposition. But we may understand that this perfectly illogical task merely reflects the instrument's metalogical function — to register metrical values by reacting to physical causes.

In trying to conceive of this function, we must face one of the most startling methodological puzzles. The mere idea of a measuring instrument seems to present a contradiction in terms inasmuch as it suggests that the means of inquiry can be identical with the objects of inquiry. However unreasonable this assumption may seem, it is possessed in common by those two sciences the methods of which are usually considered as diametrically opposed; namely, physics and history. What has proved to be true of the physical instrument can be shown to be true also of the historical document. Just as the physical instrument is a physical object and, therefore, effected by the laws which it intends to test, the historical document is, itself, an object of historical inquiry; for it participates in the historical life which it helps to investigate. And not only is it true that every investigator must admit this seeming paradox as an indisputable fact, but he must even consider it for the sake of his investigation as an indispensable premise. Unless the instrument or the document had a definite place within the physical or the historical world, they could tell us nothing authentic about them. But on the other hand it seems that just in being *part* of physical nature and *part* of history, they are disqualified to represent either of them objectively. How can they reveal more than that part which is circumscribed by their individual status? How can we derive from them an objective understanding in which we conceive the parts in relation to the whole?

The answer is that we establish this relation of the part to the whole whenever we construct a measuring instrument, whenever we interpret a historical source. In order to construct the one and to interpret the other, we must preconceive the universal, physical, or historical, constellation of which they form a part. We *can* preconceive it only by ordering the knowledge which has previously been gathered, into a system. That is: we must make some primary (axiomatic) assumptions which enable us to correlate individual observations in a systematic fashion, and we must supplement the sum of these observations by some secondary (hypothetical) assumptions which help to fill the missing links. If now, on the basis of such a system, we construct an instrument or interpret a source, the outcome of the experiment or the information derived from the source, can either confirm or contradict the system presupposed. In the one case the new physical or historical "fact" immediately enters the systematic relations previously established, and, by entering them, confirms not only the validity of these relations as such, but also the accuracy of the individual construction of instrument or interpretation of document. In the other case it destroys the coherence of these relations, and, by destroying them, disproves the validity of the assumptions on which the construction of the instrument and the interpretation of the source had been founded. At the same time, however, it indicates the direction in which the improvement must be made under the latter condition. The preconceived system must be altered in its secondary hypotheses and, if necessary, even in its primary axioms, so that it can assimilate the new fact. And after it has thus been rectified, it can be used as a basis for a more exact construction of instruments or for a more adequate interpretation of sources. The instruments and sources, thus renewed, will give a more accurate account of the facts. And the facts, thus specified, will return to the system by which they have been determined and will renew its obligation to assimilate them.

Within this process we can observe how that which we usually call "fact," is neither ultimate nor immediately given. The historical fact is revealed by a source, and sources need interpretation. The physical fact is registered by an instrument, and instruments are the outgrowth of construction. The fact as such reflects, therefore, all the systematic problems of construction and interpretation. And in appealing to facts, we unconsciously appeal, whether we admit it or not, to the systems which are responsible for their formulation. But, at the same time, we appeal to something more than that. We appeal to those occurrences which have tested the system. We appeal to those incidents in which a physical object that had been endowed with metrical significance, lived up, as it were, to the logical standards implied in its metrical endowment. We appeal to those cases in which moving bodies have confirmed and specified, through coincidence with other bodies, those metrical relations which had been presupposed in the axiomatic system. To call the knowledge of these occurrences empirical (in the sense of something that can be experienced directly) would be absurd. For, whatever we know of them, we know only in terms of the system which we have presupposed. To call it, on the other hand, *a priori*, would be equally absurd. For, although we know the occurrences only in terms of the presupposed system, we cannot know them by virtue of deduction. What they reveal to us is the answer to a question which we have presented in logical terms, but which we cannot answer by logical means. They inform us whether that which we have conceived as logical may be considered as real. Could we ever decide this problem by pure reasoning, we would not need to ask the question. But, since we are obliged to ask it, we must admit that, whatever the answer may be, we cannot dispute it by reasoning. Provided that an experiment has been executed with perfect methodical care, its failure or its success must be considered as nothing less than a metaphysical manifestion. To be able to reckon with these manifestations is the art of the physicist; to believe in the consistency of their message, is his silent metaphysical creed. The method of his art consists in testing a purely logical and, therefore, *pre*-physical conception by provoking an entirely metalogical and, therefore, also *meta*-physical act. In the study of the correspondence between the two is established what we call the world of physics.

The physicist himself may feel shocked at the idea that he, the most exact of all scientists, should share the company of people who indulge in metaphysical speculations. But perhaps his distrust in metaphysics will be slightly shaken when he is told that the very basis of his scientific pride, the measuring instrument, is one of the most striking examples of a metaphysical symbol. As a physicist he will not hesitate to admit that the metrical significance of his instruments is embodied in their physical construction. Should he be averse to philosophy, he may be surprised to learn that if anything deserves the name of metaphysical divination it is such an act of embodiment.

III

Indeed, if this metaphysical element did not enter, if we were to remain in the purely logical sphere, there would be no way of escaping the circle which we have described above. Viewed from a logical standpoint, the claim of universality in the conception of laws is related to the claim of accuracy in the construction of instruments as the universal is related to the individual. As a negative instance this correlation of the two is, to be sure, of the greatest importance for physical inquiry. If, for instance, an experiment fails to test an individual hypothesis, this failure reflects not only upon the hypothesis as such, but on the entire system of assumptions upon which it was founded. It criticizes not only the construction of the individual instrument, but the whole system of methodical rules from which this construction has been derived. In this sense it is no exaggeration to say that with every individual experiment a whole system of experimentation comes to a test. But to make this correlation of the individual and the universal the basis of a positive method of inference would be a fallacious procedure. We would deduce the individual claim from the universal one, and then test the validity of the latter by showing that it can include the former, — a subsumption which would only prove what the deduction had defined. As it is, however, we not only *derive* the individual claim from the universal system, but *embody* it by construction, in a physical instrument. Then we let the instrument do its work, and see if the outcome can be subsumed under the universal premise. What first appeared as a logical circle, and, therefore, as self-contradictory, thus turns out to be a methodical cycle, and, therefore, self-regulating.

If we would study this cycle in detail and trace the historical development which leads from the Newtonian system of mechanics through the special to the general theory of relativity, we would find that the claim of methodical universality is always connected with the claim of physical accuracy, and that the latter can be supported only by a physical anticipation. We could show, for instance, how, after the classical principle of relativity had been questioned as to its universal validity because it could not account for the constancy of the velocity of light, Einstein satisfied the logical demand for universality by exposing a physical inaccuracy in the formulation of the Galilean equations. We could show, moreover, how the Lorentz transformation, after having replaced the Galilean equations by a more accurate account of what actually happens to rods and clocks according to the established laws of optics and mechanics, turned into a methodical postulate which "prescribes" (as Einstein says) the mathematical form in which laws *must* be conceived. We could finally demonstrate how, in the transition from the special to the general theory of relativity, the methodical postulate that the laws of nature should be conceived as universally covariant and no longer be confined to Galilean systems of reference, finds its physical counterpart in the assumption that there is a continuity in the world of physical events which justifies the use of a Gaussian system of coördinates as an accurate method of correlation.

However, we shall confine ourselves to stressing merely those points which are necessary in order to solve the paradox from which we started. They may be summarized in the formulation of the two principles which govern the cycle of physical inquiry, and which seem to contradict, but really supplement each other:

1. The claims of universality and accuracy represent two different sides of one and the same claim, and can, therefore, not be separated.

2. The claims of universality and accuracy represent the same claim from two different sides, and must, therefore, be distinguished.

The first of these statements points out that the physicist cannot demonstrate the logical consistency of the rules which are meant to conduct his inquiries without anticipating corresponding physical laws which govern the objects of his inquiry. This statement alone would be sufficient to destroy the suspicion of a vicious circle. For if every methodical postulate necessarily implies a physical hypothesis, the one cannot be inferred from the other, but both must be set forth simultaneously.

The assumption of such a simultaneous act, however, seems to deliver us from one methodical dilemma only by throwing us into a new one. For if the claims of universality and of accuracy are at bottom only one and the same claim, their relation can be of no logical significance. Being an identical relation, it could not serve as a basis for justifying an hypothesis or controlling an inference. It could explain a valid system only as a happy guess, not as the outcome of methodical progression.

At this point the second statement reveals its positive meaning.

It indicates that of the two claims which are necessarily interdependent, the claim of universality has a logical content and must, therefore, be judged with regard to its systematic consistency, while the claim of accuracy has a physical content which refers to the actual sum of experimental knowledge. The claim of universality thus becomes the motive of systematization, which is a logical procedure based on the assumption of invariant axioms. But invariants, assumed within the field of physics, are subject to physical control. Hence, the claim of accuracy has to fulfill the function of restricting the range of the axioms on which the claim of universality was originally founded, although the tendency of these revisions is always to reëstablish the claim on a higher level.

SENSIBLE APPEARANCES AND MATERIAL THINGS

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THE term "sense-datum" found its way into epistemological discussion some few years ago, mainly through the initiative of Professor G. E. Moore and Mr. Bertrand Russell. The object of coining the new word was to have a term to denote that reality of which everyone would admit without implying any specific theory of its nature. "If we want to indicate," Professor Moore writes in one of his recent papers, "what kind of entity is meant by 'sense-data,' in a way which can leave no doubt that there certainly are entities of the sort, I do not know that there is any clearer way of doing so than by saying that they are the sort of entities about which we make such judgments as 'this is a coin,' 'that is a tree,' etc., where we are referring to something which we are at the moment perceiving by sight or touch. Everybody can easily discover for himself the entity about which he is talking, when, under such circumstances, he judges 'that is a tree.' And in calling this entity a 'sense-datum' we by no means imply either that it is not identical with that part of the surface of the tree which he is seeing, nor yet that the opposite philosophical view, according to which, so far from being identical with this part of the surface of the tree, it is merely a sensation in his own mind, may not be the true one."[1] The significance, then, which Professor Moore wishes to attach to the term is sufficiently apparent. And it is obvious that an expression such as "sensations," even when it is used to denote not acts of apprehending but features apprehended, is not of the noncommittal character which he desiderates, but carries with it an implication that the features referred to are in some way, "in the mind." Even the term "presentations," which James Ward was in the habit of employing, is not free from ambiguity, for, although Ward in his later writings persisted that he did not conceive "presentations" to be subjective modifications, yet he still spoke of them as "psychical" or "internal" objects, thus assuming a particular theory as to their nature.

I confess, however, that I am far from satisfied that the term "sense-datum" is so perfectly free from implications as is claimed. In the first place, it certainly does seem to suggest that what is thus designated is something "given," whereas it may quite well be the case, as I shall attempt to show, that the specific entities denoted by the term never are, as such, "given." But that is not all. Professor Moore affirms that the phrase "sense-datum" is primarily used "simply as a name for entities the existence of which no one disputes."[2] He is here implying, that is to say, that the entities in question are existents; and this, again, is just one of the assumptions which at the outset, at all events, one wishes to avoid. The fact is, I think, that, for a concept of this sort, it is impossible to invent a name that will be satisfactory to everybody. The parallel to which Dr. Moore appeals — the term "judgment," namely, which means primarily something which we all acknowledge to be a fact, whatever our theory of its nature may be — is no true parallel. For, by long usage, the term "judgment" has acquired that primary meaning, whereas in the present instance we have no such long usage to fall back upon. In what I have to say, on this occasion, I shall speak generally of "sensible appearances," and make no claim that the phrase is free from theoretical implications.

What I mean by the phrase "sensible appearance" I can best make clear by means of an illustration. Three persons, A, B, and C, are, we will suppose, sensuously apprehending an object which is ordinarily described as a red rose. A, we will say, is an artist, B is a botanist, and C is color blind. In such a case, the red color of the rose, let us call it R, will seem different to each one of these persons — slightly different to A and B, while to C it may seem barely distinguishable from the hue of the leaves. It will seem, we will say, as r_1 to A, as r_2 to B, and as r_x to C. The question, then, with which we are now concerned, is as to the nature of r and of its relation to R which, meanwhile, we are taking to be an actual property of a real object in the natural world. The epistemological problem of the nature of perception and of the object that is apprehended in perception arises largely, at any rate, from the circumstance that what we have reasons, good or bad, for describing as the same material thing *appears* differently to different percipients, and even to the same percipient at different times and under differing conditions. Were there no such variations in the way in which what we regard as one and the same material thing appears, did that thing always manifest itself uniformly to percipients, however they might be situated, there would still no doubt be, in this connection, an epistemological problem, but it would assume a form quite other than that which it has assumed for us. In such circumstances, certainly, the theory that the *esse* of sensuous things is *percipi* would hardly have been propounded; it is scarcely conceivable that any serious doubt would then have been felt as to the essentially objective character of sense-qualities.

This consideration itself suggests the kind of inquiry it is at first requisite to pursue. If what we have reason for regarding as one and the same material thing appears differently to different percipients, there is at least a *prima facie* ground for suspecting that the differences in question will be traceable to differences in the process by which there have come to be appearances of the thing at all to the percipients concerned. In other words, *the natural* procedure will not be forthwith to assume that if the sensible appearances are different the percipients must be apprehending different objects, but, rather, to start from the position which in ordinary experience we all take to be true, and which, save for the circumstance to which I have referred, probably philosophers would not deem it necessary to dispute, and endeavor to ascertain from a scrutiny of the perceptive activity whether an adequate explanation may not be furnished of the different appearances presented by one and the same material thing. I emphasize this point on account of a contention, about which I shall have something to say later, that has been put forward in quite recent discussion.

To determine the character of perceptive activity is, of course, a psychological problem, and here I can only indicate, in the briefest manner, the mode of interpreting it which I should be prepared to defend. It seems to me that what it is now usual to call the sensum theory — the theory, namely, that sensory appearances are separate existents, caused in some way by the action of physical entities either upon the body or the mind of the percipient — is open to the objection which has long become a commonplace objection to the older empirical theory that originated with Locke and Hume, that it constitutes so violent an antithesis between the process of sense-apprehension on the one hand and that of thinking or judging on the other as to preclude the possibility of giving an intelligible psychological account of either of these processes. Here, again, an illustration will be the shortest way of explaining what I mean. When a percipient is aware of two so-called sensa or sense-data, say r_1 and r_2, two shades of red, and not only apprehends each for itself, thus holding them apart, but pronounces them to be like one another or different from one another, he is obviously using the *notions* or *concepts* of likeness or difference, and it is equally obvious that these notions or concepts are not explicable by the mere presence of r_1 and r_2 alone. It is not part of what is taken to be the datum r_1 that it is like r_2 or different from r_2; and it is equally not part of the assumed datum r_2 that it is like r_1 or different from r_1. If, now, it be said that the sensa of sense-data r_1 and r_2, having occurred and been apprehended, give rise to the idea or notion of their likeness or difference, the language thus employed simply conceals the entire absence of explanation in what is said. The assumption is that r_1 may be simply and immediately apprehended, and that r_2 may be likewise simply and immediately apprehended. What, then, is it that takes place when r_1 and r_2 are somehow held together in an act vaguely called an act of comparison, and the new idea of their likeness or difference arises? The fact is that, in such a case, we should be wholly unable to explain in any way what we mean by the holding of r_1 and r_2 in the mind together, or to see how from that supposed act the new idea of likeness or difference emerges. We should simply be falling back upon the perfectly barren hypothesis that it *is* the nature of the psychical mechanism to hold separate sensa or sense-data together in an act of awareness and to produce, under these circumstances, automatically so to speak, ideas of relation. But to suppose that, at any period in the life of conscious experience, ideas of relation spring up in this manner *de novo* when sensa or sense-data, already clearly and distinctly marked off from one another, are somehow compared and brought into connection, is tantamount to resting content with the assumption of a wholly unintelligible procedure on the part of what we call the mind. We come here, in short, to the *impasse* of being obliged to postulate, as Kant was obliged to postulate, a unique faculty of thinking or judging suddenly emerging full-fledged into being, possessed from the very start with a whole apparatus of categories, and concerning which all we can do is to point to the results to which *ex hypothesi* it gives rise. I suppose some would be inclined nowadays to view this as an instance of "emergence"; but I am persuaded that no psychologist who is really serious with the problem can leave the matter there. He is bound to ask himself how *ideas* of relation gradually come to be formed out of apprehended contents of a more primitive or rudimentary type. Now, that means that he must radically change the Kantian conception not only of thinking but also of sense-apprehension. If the process of thinking be, so to speak, of one piece with the process of sense-apprehension, if it be, in other words, a more evolved type of a process that is genetically one and continuous, then it is certain that experience does not begin with separate, distinct, and definitely marked off sense-data. Sensuous features or characteristics can only be clearly and sharply distinguished from one another through and by means of those very ideas of relation the origin of which it is the business of psychology to investigate. Or, to put the matter otherwise, if "*ideas* of relation," psychologically regarded, be, as I conceive they obviously are, outcomes of psychical development, so, also, are those sensible appearances which are misleadingly called sense-data. The definiteness, the distinctness, the separation, which in mature experience they exhibit, is by no means an original characteristic of them, but a derivative characteristic — a characteristic that is due to the gradual development of the mental process of apprehending. And if this be so, we gain at once an insight into the nature of the mental process in question. For there is, so far as I can see, only one way in which an apprehended content can become more definite, more distinct, and more precise, and that is by being differentiated from other contents and by being contrasted with them. We are thus led to recognize that the act of apprehension is from the very first a process of discriminating, of distinguishing, of comparing, — that in its earlier stages, whilst differing, of course, vastly in degree of completeness from those acts which we are in the habit of describing specifically as acts of comparing and relating, or, in other words, as acts of thinking, is yet in nature essentially identical with them. We are led, in short, to recognize that, as we trace back the stages of mental development, we come upon a discriminative activity that evinces itself in ever simpler and more rudimentary phases — a discriminative activity which is prior to that in which what Lotze called "*ideas* of relation" are consciously used, and on the basis of which those "ideas of relation" are subsequently formed and applied.

I would insist, then, upon the necessity in regard to our present problem of being in earnest with the conception of *discrimination* as the essence of any act of apprehension, however primitive and crude that act may be. Just as Kant maintained that the act of synthesizing *is* the very act of knowing, so I would maintain that the act of discriminating *is* virtually the act of knowing, or, at all events, the fundamental characteristic of that act *quâ* act. And the importance of this consideration is illustrated, it seems to me, by several recent discussions of the subject. In dealing, for example, with what he calls "the multiple relation theory of appearing," by which title he intends, I believe, some such theory as that which in various papers I have tried to work out, Dr. C. D. Broad, in his book that was published last year, represents it as based upon the assumption that there is an ultimate relation of "appearing or seeming"; and, in such case, the difficulty is, of course, to find any ground for supposing that we are in fact aware of any such relation. But if by "ultimate" be meant here, as I suspect is meant, not further explicable, then I should refuse to admit that the relation is "ultimate." On the contrary, I should urge that this characteristic of "appearing" is in large measure explicable from the very nature of perceptive activity itself. Always in sense perception there *must* arise the contrast between what I have called the content apprehended and the real object upon which, as I take it, the act of apprehension is directed. Any material object whatsoever consists of a vast number of elements and features, and those features of it which are discriminated, and of which there is, therefore, awareness, will be at the best but a fraction of the totality of features of which the object itself is composed. The *sum* of qualities actually discriminated in and through the perceptive act will clearly, therefore, be different *as a sum* from the *sum* of features characterizing the object. Could some god be induced to transform, by a creative fiat, the *sum* of qualities in question into a sum of qualities characterizing an existent object, while at the same time annihilating the act of apprehension on the part of the finite mind in and through which alone the sum of qualities, as apprehended content, had its being, then to that god's observation the newly created object would be by no means a mere reduplication of the original object. Were the god further induced to annihilate the original object and to substitute in its place that which he had just called into existence, then, as a constituent of the interconnected realm of existence, the latter object would play a part quite different from the former. Advancing knowledge might, in other words, be likened to a pattern gradually coming out. Only the process of "coming out" is never completed; there is always more to come out; there is always a vastly greater amount of detail than our limited powers of discriminating are capable of discerning; there is always a more elaborate network of connections than we have been able to trace. In all stages of the development of the process of apprehension, the contrast between what actually has been discriminated and the more that remains to be discriminated must of necessity hold. In contradistinction to the richness, the fulness, the completeness of a really existent object, the term "appearance" or "phenomenon" carries with it, therefore, the significance of fragmentariness, of incompleteness, of mutilation, — pecularities that point to the abstraction characteristic of apprehension in all its stages.

"It is always difficult," Dr. Broad writes, "to understand how anything can seem to have characteristics which are other than and inconsistent with those which it really does have."[3] If what I have just been urging be justified, the difficulty would, on the contrary, rather be to understand how, under certain circumstances, a thing could fail to seem to have characteristics other than those which it really does have. To take our former illustration. Suppose that the petals of a rose are veritably characterized by a specific shade of red. Is there, in that case, any occasion for surprise in the fact that their actual color will seem different to two observers who view the rose from different distances, or when one of them observes it in daylight and the other in twilight, or when one sees it through a pair of dark spectacles and the other with the naked eye? Surely the surprising thing would be if the fact were otherwise. Or, again, if normal vision be a means through which the actual colors of things are more or less accurately apprehended, is it, on the face of it, reasonable to expect that there will be equally accurate apprehension of the red petals of the rose on the part of the person who is afflicted with red color blindness? Why the red petals should appear to the color blind person precisely as they do is no doubt a psychological problem that is by no means easy of solution. Much as we know about the structure of the eye, it is still true that we know extremely little about the manner in which it functions as the organ or instrument of visual apprehension. In what way does it subserve not merely the physical process of stimulation but as an apparatus through and by means of which a mental act is directed upon an object? One has only to frame a question of this sort in order to realize how far off we are from being in a position to answer it. But if it be part of the work of a pair of normal eyes to function in this respect to some extent after the fashion of a pair of colorless spectacles, it is not perhaps a wild stretch of imagination to surmise that in cases of red color blindness the eyes function to some extent after the fashion of a pair of colored spectacles. However that may be, I can find nothing in the ascertained facts of delusive perceptual situations that tends even slightly to render improbable what I am contending with respect to sensible appearances. On purely psychological grounds, I think we are entitled to assert that the appearance of a physical thing is a way in which that thing is cognized, a way in which knowledge of it is had, that we know a physical thing in and through its appearances, and that in our mature experience, although we may frequently be the victims of delusive appearances, the appearances of a thing in veridical perception are partial views, so to speak, of the thing's actual characteristics.

Considered, then, in abstraction from the physical object, sensible appearances are not, I should urge, existents; they are not entities that *have* characteristics, they *are* characteristics. Dr. Broad has himself distinguished with sufficient clearness between what he calls "abstracta" and "existents."[4] In the first place, an existent can, he points out, be referred to in a proposition *only* as a logical subject. But this property some abstracta share with existents. In the second place, however, all existents are either directly and literally in time, or appear to human minds to be directly and literally in time. Abstracta, on the other hand, although some of them are closely connected with existents and thereby become indirectly connected with time, neither are nor appear to be directly and literally in time. And under the head of abstracta he includes qualities, relations, numbers, and also propositions and classes, if there be such entities. Now, my contention is that sensible appearances, when regarded in and for themselves, are just qualities, or complexes of qualities, and that they are, therefore, abstracta in the sense indicated, that they are real but non-existent. A sensible appearance is, *quâ* sensible appearance, outside the region of temporal flux and change. Nothing can alter it, for the simple reason that it is not a concrete entity that can be operated upon, acted on, or affected, in any way whatsoever. Moreover, as it is not in time, so also it is not, strictly speaking, in space. Sensible appearances do not, as such, act and react upon each other; they do not obey the law of gravitation, or any other physical law; they do not exert force, they are not modes of energy. Neither are they mental states, — states of feeling or of cognizing or of conation.

On the other hand, according to the theory worked out by Dr. Broad, sensa, although neither physical nor mental, *are* existents, —

they are, that is to say, particular entities which *have* literally and dyadically the characteristics which the objective constituents of perceptual situations seem on inspection to have. Shapes, colors, temperatures, and so on, "inhere" in sensa. Admittedly these sensa are existents of a very peculiar kind. In having spatial and certain other characteristics they resemble physical things, as ordinarily conceived, in their privacy they resemble mental entities; they are "transitory" and "short-lived;" they are occurrents in a peculiar kind of continuant, which is a sort of substance, though not a physical substance. I fail to see what the warrant is supposed to be for the assumption of a realm of existents of this curious nature. And further: not only is the assumption a flagrant violation of the maxim which Mr. Bertrand Russell considers should inspire all scientific philosophizing, *entia non sunt multiplicanda praeter necessitatem*, but it seems to me to be beset with difficulties out of all proportion more formidable than any which it may be alleged to remove. I can only refer briefly to certain of these. Dr. Broad himself acknowledges that the status of sensa in a world which consists almost wholly of physical events and objects is "certainly most peculiar."[5] But more peculiar still is their mode of generation. Confessedly, the generation of sensa by physical and physiological processes must be considerably different from the causation of a change in one physical thing by a change in another,[6] yet why physical existents acting on other physical existents should give rise to existents which are not physical is obviously a mystery which has to be left as such. Nor is it the only one. The generated entities retain certain of the characteristics of the entities that produce them, — the primary qualities, namely, — but exhibit an array of other characteristics — the secondary qualities — which are nowhere else to be met with in nature. So far as the latter are concerned, we are confronted here with the enigma which baffled the older materialism; and, so far as the former are concerned, there is the additional conundrum thrown in of accounting for the circumstance that these generated entities are like their physical antecedents in some respects while they are wholly unlike them in others. Moreover, it would appear that, in spite of the assertion to the contrary, some of the sensa at least are after all, according to the hypothesis, physical. For admittedly visual and tactual sensa possess the "differentiating attribute" of extension, and consequently, by Dr. Broad's own showing, they should be existents of the kind called "material."[7]

The objection that I am, however, at present mainly concerned to press is that sensa, conceived as existents of the kind indicated, have no title whatever to be described as "appearances of" material things. Professor Moore, indeed, lays it down that "it is no part of the sensum theory to assert that corresponding sense-data, *if* they are sensa, can be properly called 'appearances' of the physical object to which they correspond, and, therefore, it can be no objection to that theory to urge that they cannot."[8] The reply is that it certainly does form part of the sensum theory, as Dr. Broad has delineated it, to make that claim. A sensum *s* may, he tells us, be said to be an "appearance of" a physical object *o*, if *s* has to *o* a certain relation *R* which it has to no other physical object. And this relation *R* — the relation of "being an appearance of" — he would apparently analyze into a causal relation, although he acknowledges that the causation involved is of "a very odd kind." Nor is this the only sense in which he speaks of sensa as "appearances of" physical objects. He is constantly implying that physical objects, or the qualities of physical objects, either are or seem to be made *manifest* to us by sensa. But how can sensa be "manifestations" of physical things when *ex hypothesi* they are altogether different from physical things? So far as the secondary qualities are concerned, instead of manifesting to us the properties of physical things, sensa exhibit properties which, according to the theory, it is "neither necessary nor useful" to suppose are in any way analogous to the properties of physical things. So far as the primary qualities are concerned, while it is argued that the correlated variations in the shapes and sizes of visual sensa are unaccountable unless "quasi-spatial" qualities and relations be ascribed to their permanent conditions, yet admittedly the only shapes and sizes directly apprehended are the shapes and sizes of sensa, and there is nothing in these sensa to force us logically to the conclusion that there must be something beyond them, having the constitutive properties of physical objects.[9] And, even if we were to allow that, on the basis of the theory, the probability of there being physical things with "quasi-spatial" qualities could be sustained, still the shapes and sizes and positions of visual or tactual sensa, as they occur in visual or tactual space, would be in no way manifestations of the shapes, sizes, and positions of things that are not in visible or tactual space, and the structure of which must confessedly be totally different from the structure of sensa.

For my part, I am at a loss to understand what precisely Dr. Broad means by the term "perception." Perception he does not hesitate to describe as "perception of physical objects."[10] In every "perceptual situation," he avers, there are present sensa, having properties such as shape, size, hardness, color, loudness, coldness, and so on. Certain of these sensa are "selected" by the mind, and some of the selected sensa are "used" for perceiving. More, however, is meant by perceiving a physical object than just sensing these sensa. The notion of a physical object contains, as an essential factor, the notion of a persistent something which joins up the various isolated sensa, and this persistent something is said to "show itself" to the conscious subject partially and imperfectly through them.[11] Yes; but the trouble is that there are, according to the theory, absolutely no ways by which a physical thing could thus "show itself." It is, indeed, pointed out that common sense identifies what it calls the "real" shape of a perceptual object with its felt shape, and that it is mainly by "active touch" that we learn about the "real shapes" of such objects. At the same time, active touch evinces itself as partly a movement-experience and partly a tactual experience; so that by its means we do not get beyond the region of kinaesthetic and tactual sensa. And, although science conceives that the regions in the movement-continuum are literally occupied by certain objects composed of protons and electrons, after the manner in which a sensum occupies a sensible place in its own field, yet more searching analysis reveals, it is contended, that the movement-continuum is itself part of the general sense-history correlated with each human body, and that sensa are not literally in "physical Space-Time," nor physical events literally in any sensible Space-Time. How, then, do the latter "show" themselves to a percipient? Furthermore, Dr. Broad insists that shape, size, and position cannot be the only characteristics of physical existents, if there be such things. Nothing, he argues, can possibly be *merely* extended and movable; *if* spatio-temporal characteristics be primary, they cannot be the *only* primary characteristics. "Whatever is extended must have some other characteristic, which is capable of covering an area or filling a volume as color and temperature do in sensa."[12] Yet this other characteristic, this "extensible characteristic," as he calls it, need not, he urges, be color or temperature, or any other quality that inheres in sensa; it may be mass or electric charge. This is as much as to say that it may be a characteristic with which we become acquainted — very vaguely and crudely, no doubt — through the avenue of touch and the so-called kinaesthetic sensations. The truth is that, although the contention that the "objective constituent" of a visual situation is never part of a physical thing may be made to seem plausible, a similar contention in regard to the "objective constituent" of a tactual situation or of resistance to bodily movement cannot be; and, as a matter of fact, I think Dr. Broad in more places than one is virtually assuming the opposite. But, on the one hand, it is, to say the least, extremely unlikely that the perceptual situation is so fundamentally different in the two cases; and, on the other hand, there is surely no reason for supposing that visual apprehension is, in any way, less adapted than tactual apprehension for disclosing to us the character of physical reality.

Lastly, not only does the assumption of sensa as existents land us in extraordinary perplexities in attempting to unfold the nature of perception, but it offers, so far as I can discover, no compensating advantages in other respects. To determine the specific kind of relation that subsists between a quality and that which it characterizes is, of course, a metaphysical problem of extreme difficulty; but, in regard to the matter before us, the problem is not in the smallest measure lightened by the supposition that the existents characterized are of the peculiar kind which the theory I have been criticizing represents. In what way is it easier to think of secondary qualities as "inhering in" sensa than as "inhering in" physical objects? There is, in truth, nothing in the scientific theory of physical things incompatible with the view that they possess such qualities as colors and temperatures; and if it be objected that "there is not the slightest reason to believe they do" possess them, the rejoinder is at any rate near to hand that neither is there the slightest reason to believe they do not. The fact that, when we are perceiving what we take to be (say) a luminous red object, vibrations of a certain period are impinging upon the eye and stimulating the retina, is, as Dr. Broad has himself more than once pointed out, no proof at all that the existent entity which is emitting these vibrations is not itself red. For it may quite well be the case that the particles of the physical object, the motions of which give rise to the vibrations that initiate the act of perception, are themselves red, or, if they are not, that the complex whole, of which they are constituents, is thus characterized. Why not? There may surely be a relationship of an unique kind between a physical thing, the constituents of which are vibrating at a particular rate, and the quality red, such that when those conditions are present the quality in question evinces itself; and if that be so, the vibrations may be the means of bringing about the act of perception in and through which the red color is seen, although the thing itself will be thus characterized whether it is perceived or no. When one contemplates the constitution of a physical thing, as it is now conceived by physicists, and tries even vaguely to picture its ultimate elements as units of electric charge, it would seem more probable far that *it* should be characterized by such a quality as red than that such a nondescript kind of entity as a sensum should be. It has, indeed, been recently objected to the former supposition that, when submitted to scrutiny, it puts too great a strain on credulity. For, it is argued, it would imply that perceived things contain in themselves all the infinitely varying characteristics they exhibit to different percipients. One man, with normal vision, sees an object as red; his neighbor, who is color blind, sees it as gray; another, who has taken santonin, sees it yellowish; while a fourth, looking at it through blue glasses, sees it bluish. We should have to assert, so the contention runs, that all these colors characterize the object simultaneously. Now, I grant at once that if that implication were involved, it would be straining credulity vastly too far; and, in that case, I, for one, should unhesitatingly reject the theory as preposterous. But this paper will have failed in its purpose if it has not shown that no such implication is involved in the view I have been laying before you.

NOTES

[1] *Arist. Soc. Proc., Supplementary Vol. II*, 1919, pp. 181–2.
[2] *Ibid.*, p. 181.
[3] *The Mind and its Place in Nature*, p. 284.
[4] *Ibid.*, p. 18 *sqq.*
[5] *Scientific Thought*, p. 527.
[6] *Ibid.*, p. 539.
[7] *The Mind and its Place in Nature*, p. 22.
[8] *Arist. Soc. Proc., Supplementary Vol. VI*, p. 188.
[9] Broad, *Scientific Thought*, p. 268.
[10] See, e.g., *ibid.*, p. 243.
[11] *The Mind and its Place in Nature*, p. 420.
[12] *Ibid.*, p. 207.

STELLUNG UND BEZIEHUNG VON SINNLICHKEIT UND WISSENSCHAFTLICHEM GEGENSTAND

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1. Alle Wissenschaft sucht die Empfindung und flieht die Empfindung, und sie flieht die Empfindung, um sie gerade wieder zu suchen und zu finden. Das ist die eigentümliche Dialektik, die sich von dem Problem her erschliesst, das ich hier behandeln will. Zunächst mag der Satz, so kurz hingeworfen, wie es jetzt geschehen ist, als Paradoxie erscheinen. Aber der paradoxe Schein verschwindet sofort, wenn er in seinem dialektischen Sinne begriffen wird.

2. Hinsichtlich der psychologischen Entstehungsfrage liegt es ja auf der Hand und wird heute wohl von niemand mehr bestritten, dass alle Erkenntnis von der Empfindung ausgeht und der Anknüpfung an die Empfindung bedarf. Wir würden auch auf mathematischem Gebiete uns nicht einmal zu dem Versuche, den Begriff der Zahl oder den Begriff der Linie zu fassen, erheben können, wenn wir nicht sinnliche Dinge zu zählen gelernt hätten, oder wenn uns nicht sinnliche Linien auf der Tafel, oder dem Papier, vielleicht auf der Landkarte zur Anschauung gebracht worden wären, oder wenn uns nicht vielleicht von der Höhe eines Berges die Wege im Tale oder die Grenzen der Felder als Linien erschienen wären. ,,Jene Linien, sieh, die des Landmanns Eigentum scheiden,“ sagt Schiller in seinem ,,Spaziergang.“ Und doch, was hat die Zahl, was hat der Begriff der Zahl mit den sinnlichen zählbaren Dingen, was hat die Linie des Geometers noch mit der sinnlichen Linie auf der Tafel oder dem Papier, oder mit der Grenze auf Feld und Landkarte zu tun? Sind Zahl und Linie in mathematischer Bedeutung nicht aller Sinnlichkeit entrückt? Zahlen und Linien in mathematischer Bedeutung können wir doch weder sehen, noch hören, noch tasten, noch riechen, noch schmecken. Das Mathematische fängt da erst an, wo das Sinnliche aufhört, und das Sinnliche umgekehrt fängt da an, wo das Mathematische aufhört. In diesem Sinne also ist es gemeint, wenn ich sagte, die Wissenschaft flieht die Empfindung. Dennoch aber bleiben selbst die mathematischen Gegenstände nicht in starrer Beziehungslosigkeit gegenüber der Sinnlichkeit stehen. Denn wir können doch die Mathematik auf das Sinnliche anwenden. Es gibt ja auch eine angewandte Mathematik. Und gerade die Tatsache, dass es auch eine angewandte Mathematik gibt, zeigt,

dass die Wissenschaft, selbst in einer scheinbar so abstrakten Form, wie in der der Mathematik, die Empfindung sucht und auch zu finden weiss.

3. Dadurch wird deutlich, dass nicht allein hinsichtlich der psychologischen Entstehung eine Beziehung zwischen Sinnlichkeit und mathematischer Erkenntnis obwaltet, dass vielmehr auch ein sachlicher Zusammenhang zwischen Empfindung und mathematischem Gegenstand bestehen muss. Denn sonst bliebe es unverständlich, wie mathematische Bestimmungen auf sinnliche Gegenstände anwendbar sein könnten. Noch offenbarer wird dieser Zusammenhang zwischen Sinnlichkeit und Gegenstand auf den anderen Wissenschaftsgebieten. Wie verschieden im übrigen auch Naturwissenschaft und Geschichtswissenschaft von einander sein mögen, das unterscheidet beide von der Mathematik und ist beiden untereinander gemeinsam, dass sie es mit Tatsachen, dass sie es mit Wirklichem zu tun haben und zwar unmittelbar, nicht allein mittelbar, wie etwa die Mathematik in ihrer Anwendung auf die Natur. Geschichtswissenschaft, wie Naturwissenschaft sind sozusagen immer auf Wirkliches angewandt, sind immer in Beziehung auf Tatsachen und sind ohne diese Beziehung auf Tatsachen garnicht zu denken; sie wären ohne diese Beziehung gänzlich leer und inhaltslos. Gewiss hat Poincaré recht, wenn er sagt, dass ,,die Wissenschaft so wenig eine blosse Anhäufung von Tatsachen ist, wie ein Steinhaufen ein Haus ist"; aber er sagt darum doch ebenso richtig, dass ,,man die Wissenschaft aus Tatsachen herstellt, wie man ein Haus aus Steinen baut." Man kann also im Sinne Poincarés die Tatsachen ebenso für das Gebiet der Naturwissenschaft, wie für das der Geschichtswissenschaft als Bausteine der Wissenschaft bezeichnen. Ob der Naturforscher den linearen Ausdehnungskoeffizienten des Eisens zu bestimmen sucht, ob er über die Atmungsorgane der Pulmonaten arbeitet, oder ob der Historiker die Geschichte eines Landes oder einer Stadt oder das Leben und die Werke einer einzelnen Persönlichkeit, wie z.B. Platons, Kants, Shakespeares, Goethes darzustellen sucht, immer muss er seine Untersuchungen anknüpfen an wirkliche konkrete Tatsachen, seien das in dem einen Falle einzelne wirkliche Eisenstäbe, im anderen bestimmte wirkliche Exemplare der Pulmonaten, im anderen wirkliche Urkunden eines Landes oder einer Stadt oder wirkliche biographische oder literarische Dokumente einer bestimmten Persönlichkeit.

Alle diese Wirklichkeiten aber sind, wie alles Wirkliche überhaupt, dadurch charakterisiert, dass sie, wie Kant betont, mit der Empfindung in Zusammenhang stehen. In der „Kritik der reinen Vernunft“ hat Kant ja dem zweiten Postulate des empirischen Denkens die berühmte Fassung gegeben: „Wirklich ist, was mit der Empfindung zusammenhängt.“

4. Ich habe bei anderer Gelegenheit gezeigt, dass und wie diese Wirklichkeitscharakteristik weiterzuführen, sowohl tiefer zu gestalten als auch schärfer und genauer zu präzisieren ist,[1] als das bei Kant geschehen ist. Für diesen Zusammenhang mag es genügen, darauf hinzuweisen, dass in der soeben erwähnten Anknüpfung der Wissenschaft auch immer eine Anknüpfung an die Sinnlichkeit liegt. Die Beispiele, die ich brauchte, machen das vollkommen deutlich. Denn die wirklichen Eisenstäbe, die wirklichen Exemplare der Pulmonaten müssen dem Naturforscher in der sinnlichen Wahrnehmung vorliegen, wie dem Historiker die Länder oder Städteurkunden oder die biographischen und literarischen Dokumente einer bestimmten Persönlichkeit, damit beide ihre, wie auch sonst immer verschieden gerichteten, Untersuchungen daran anknüpfen können.

Freilich dienen diese Objekte auf beiden Wissenschaftsgebieten nur zur Anknüpfung. Nicht aber sind sie ihr Ziel. Gewiss kann der Physiker immer nur an einzelnen wirklichen Eisenstäben seine Beobachtungen machen und seine Untersuchungen durchführen, wenn er den linearen Ausdehnungskoeffizienten des Eisens bestimmen will. Aber dieses Eisen selbst und der Ausdehnungskoeffizient selbst sind ihm ja nie in der sinnlichen Wahrnehmung und Beobachtung gegeben. Wenn er also in seinem Ausgangs- und Anknüpfungspunkte an die einzelnen Tatsachen die Sinnlichkeit suchen muss, so muss er sich in seinem Ziele wieder von ihr entfernen. Sein Ziel liegt ja nicht in den in der sinnlichen Wahrnehmung gegebenen Tatsachen, sondern in der Ermittelung von Beziehungen, durch die erst die Tatsachen zu Bausteinen der Wissenschaft werden können. Ja, durch sie können, wie die Erkenntnislehre zu zeigen vermag, und worauf ich später noch kurz hinzuweisen habe, auch die Tatsachen überhaupt erst Tatsachen sein. Aber auch ohne schon jetzt diese eigentlich erkenntnistheoretische Frage zu berühren, wird deutlich, dass es sich in der Ermittelung der Beziehungen, wie wir sie in unserem Beispiele im Auge hatten, doch selbst immer um Beziehungen von Tatsachen handelt. Der Begriff des Eisens selbst und seines Ausdehnungskoeffizienten mögen gewiss keine Tatsachen sein. Aber die zu ermittelnde Beziehung von Ausdehnung und Erwärmung soll doch nicht von irgendwelchen Phantasiegebilden gelten, von denen sie ja garnicht gelten könnte, weil das eine vollendete Sinnlosigkeit wäre, sondern gerade von den wirklichen in der Natur vorkommenden Eisenbeständen. Und genau das Analoge gilt von den Untersuchungen des Zoologen über die Pulmonaten. Wenn sich also der Naturforscher in seinem Ziele von seinem sinnlichen Ausgangspunkt entfernt, so tut er es doch gerade, um ihn auch wieder zu suchen und zu finden. Nur hat die sinnlich beobachtbare Tatsächlichkeit an seinem Ziele für ihn eine andere Bedeutung als an seinem Ausgangspunkte. An diesem war sie Problem; sein Ziel ist es, sie aus allgemeinen Beziehungen zu begreifen und zu erklären.

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[1] Ich verweise dafür auf die das Problem behandelnden Abschnitte meiner Schriften über „Wahrheit, Wert und Wirklichkeit“ und „Die Idee.“

5. Die Aufgabe des Historikers stellt sich im einzelnen gewiss ganz anders dar. Und doch können wir für die Stellung der Sinnlichkeit im Verhältnis zu ihrem Gegenstande ein ähnliches Entfernen und Wiedersuchen und -finden, nur in anderen Richtungen und Dimensionen, konstatieren. Die in der Wahrnehmung sinnlich gegebene Urkunde ist ja nicht der eigentliche Gegenstand des Historikers, sondern allein seine Quelle. Sein Gegenstand, sei das für den Literar- oder Kulturhistoriker z.B. Shakespeare oder Goethe, Sophokles oder Kant, braucht, ja kann insofern er der Vergangenheit angehört, garnicht unmittelbar wirklich sein. Und er ist als historischer Gegenstand immer auch einbezogen sowohl in einen unwirklichen Sinn- und Wertzusammenhang, wie in den wirklichen Zusammenhang kulturellen Wirkens. Er bleibt aber ebenso bezogen auf die historische Quelle. Der Fortgang von dieser zum Gegenstand ist also auf der einen Seite ebenfalls eine Entfernung vom sinnlich Wahrnehmbaren. Eine Untersuchung über „Hamlet“ oder „Faust“ kann selbstverständlich immer nur anknüpfen an die sinnlich wahrnehmbaren Texte Shakespeares oder Goethes. Aber diese sind darum doch nur die Mittel zur Ermittelung eines unsinnlichen Sinnes, der sie darum sofort vom Sinnlichen, an das sie anknüpfen konnte, entfernt. Zugleich aber muss sie dieses auch wiederum suchen und finden, und zwar in vielfachem Sinne. Ich will hier nur auf zwei Punkte hinweisen: erstens auf die Anschaulichkeit und Lebendigkeit in der Darstellung ihres Ergebnisses, wie sie als Voraussetzung selbst eines Minimums des Verstehens der Darstellung notwendig sind, und zweitens auf die Darstellung als solche, insofern sie doch immer, sei es im geschriebenen, sei es im gesprochenen Worte, also überhaupt in der Sprache erfolgt. Darum freilich kann sich auch das Wort nicht in seinem optischen und akustischen sinnlichen Bestande erschöpfen. Sein sinnlicher Bestand kann und muss zugleich auch immer Ausdruck eines unsinnlichen

Sinnes sein. Gerade darum ist auch auf historischem Gebiete ein Entfernen vom Sinnlichen und eine Rückkehr zu ihm möglich.

6. Nun erheben sich aber sogleich neue bedeutungsvolle Fragen. Ernst Planck hat einmal die Empfindung ,,den einzig legitimen Ausgangspunkt aller Naturforschung" genannt. Gleichzeitig fordert er ,,die vollständige Loslösung des physikalischen Weltbildes von der Individualität," oder wie er noch sagt, ,,die Emanzipierung von den anthropomorphen Elementen." Ist nun aber die Empfindung, wie eine weitverbreitete, ja auch heute fast noch allgemein herrschende Annahme meint, zu der ja auch Planck neigt, wirklich etwas bloss Individuelles? Und wie könnte sie dann überhaupt ein legitimer Ausgangspunkt der Forschung und zwar nicht allein der Naturforschung sein?

Auf die zweite Frage können wir zunächst kurz antworten: Sie könnte es in der Tat nicht sein. Das folgt schon aus dem Gedankenkreise der Antike, den wir kurz als die antike Sophistik zu charakterisieren pflegen. Und dass das schon aus der antiken Sophistik erkennbar wird, darin dürfen wir deren entscheidendes und bleibendes Verdienst sehen, mag sie im übrigen auch den Fehler begangen haben, die Empfindung als etwas bloss Individuelles auszugeben. Freilich war — und damit kommen wir zur ersten Frage — die Betonung des Individuellen auch ein Fehler, so war sie doch nicht bloss ein Fehler. Das bedeutet zugleich, dass, wenn in der Empfindung auch etwas Individuelles liegt, darin doch nicht etwas bloss Individuelles liegen kann. Denn sonst könnte sie in der Tat keiner Wissenschaft als Anknüpfung dienen. Da es aber ohne diese Anknüpfung nicht zur Wissenschaft im strengen Sinne kommen könnte, wäre Wissenschaft im strengen Sinne auch garnicht möglich. Deren Leugnung durch die Sophistik war also selbst wiederum konsequent, wenn auch die Konsequenz sich selbst aufhebt, gerade weil sie selbst schon ein wissenschaftlicher Gedanke und damit ein Schritt in der Dialektik der Erkenntnis selber ist. So wahr nun aber die Wissenschaft wirklich ist und damit auch ihre Anknüpfung an die Empfindung wirklich ist, so wahr ist die Empfindung als solche nicht ohne weiteres legitim, sie muss erst legitimiert werden. Die Sinnlichkeit trägt also ihre Legitimität nicht ohne weiteres in sich, sie bedarf erst noch der Legitimation.

7. Dazu führte geschichtlich zuerst, wenn auch noch in ganz elementarer Weise, die Einsicht Platons. Er begriff, dass, damit auch nur die Subjektivität und Individualität der Empfindungen behauptet werden könne, dafür doch auch schon vorausgesetzt sind ihr Sein (εἶναι), ihre inhaltliche Beschaffenheit (ποιότης), ihr So-Sein

(οὕτω εἶναι), ihr Verschiedensein (ἕτερον εἶναι) von einander, das Eines-Sein einer jeden für sich (ἓν εἶναι), ihre numerische Einheit und Vielheit (ἓν εἶναι — πολὺ εἶναι) und damit weiter das ganze Gebiet der Zahlenbestimmtheit der Empfindungen, insofern wir von einer Empfindung, zwei Empfindungen usw. (μία αἴσθησις, δύο αἰσθήσεις usw.) sprechen können.

Damit eröffnete Platon wenigstens einen Ausblick auf jenes Bereich, das wir als das der Kategorien zu bezeichnen pflegen. Das Kategorienproblem hat also eine lange geschichtliche Entwicklung, die, wenn auch noch nicht dem Namen — den gab erst Aristoteles — so doch der Sache nach bei Platon beginnt. In ihr ist es später Kant gewesen, der die gegenstandskonstituierende Bedeutung der Kategorien besonders tief erkannt und betont hatte. Auch das Problem der Empfindung hat innerhalb der Kantischen Leistung seine wichtige Bedeutung. Unter der Bezeichnung von „Form" und „Inhalt" der Erkenntnis werden nun auch Kategorie und Empfindung bei ihm eng aufeinander bezogen. Nach alledem hätte man erwarten können, dass Kant auch das Problem des Verhältnisses von Empfindung und Gegenstand schon ins Reine gebracht habe. Aber soviel er für diese Aufgabe, besonders in der „Kritik der Urteilskraft," geleistet haben mag, so hat er uns doch noch viel zu tun übrig gelassen.

8. Um Stellung und Verhältnis der Sinnlichkeit zum Gegenstand zu verstehen, kommt es zunächst darauf an, zu begreifen, dass die Empfindung garnicht losgelöst sein kann vom Zusammenhange der Kategorien, sondern dass sie in ihn und durch ihn auch in den Zusammenhang der Begriffe eingebettet und verwoben ist. Und um das wiederum in seiner ganzen Tiefe und Bedeutung zu verstehen, müssen wir radikal brechen mit jener Auffassung, die herkömmlicherweise den Begriff als blosse Abstraktion fasst; wir müssen vielmehr den Begriff selbst als funktionales Gefüge verstehen. Das habe ich bei anderer Gelegenheit in ausführlicher Weise darzulegen versucht. Es in einem kurzen Vortrage zu behandeln, wäre unmöglich. Aber für das Problem, das ich hier zu erörtern habe, ergibt sich daraus wenigstens soviel, dass die Empfindung, was sie durch ihre Einbezogenheit in den Zusammenhang der Kategorien und Begriffe an vermeintlicher Selbständigkeit verliert, an echter Bedeutung für die Gegenstände gewinnt, ja, dass sie allein durch ihre Einbezogenheit in diese Zusammenhänge eine Bedeutung für die Gegenstände gewinnen, die Wissenschaften also an sie anknüpfen können. Losgelöst von jenen Zusammenhängen könnte sie für die Wissenschaften keine legitime Bedeutung haben. Aus ihrer Ein-

bezogenheit in jene Zusammenhänge erwächst ihr die Legitimation und damit den Wissenschaften für die Erkenntnis ihrer Gegenstände das Recht, an die Empfindung anzuknüpfen. Dadurch allein vermögen auch Tatsachen als Bausteine der Wissenschaft verwendbar zu sein und auch der Wissenschaft als Argumente zu dienen.

Weil die Empfindung also selbst eine Bedeutung für die Gegenstände hat, darum kann sie nicht allein subjektiv oder individuell sein und bleiben. Denn eine Bedeutung für die Gegenstände haben, heisst ja gerade eine gegenständliche, also zugleich eine übersubjektive, überindividuelle Bedeutung haben. Die Empfindung setzt, wie wir seit Descartes zu sagen pflegen und auch ohne Bedenken in Zukunft weiter sagen dürfen, Subjekt und Objekt miteinander in Beziehung, indem sie dem Subjekte das Objekt, um mit Descartes zu sprechen, „anzeigt,“ wenn sie es auch nicht ohne weiteres „abbildet.“ Aber sie könnte es auch nicht anzeigen, wenn sie ausser ihrer subjektiven und individuellen Bedeutung nicht auch eine gegenständliche Bedeutung hätte. Der Vorgang des Empfindens mag und muss stets in einem Subjekte verlaufen. Der sinnliche Inhalt muss darum doch über das Subjekt hinaus auf den Gegenstand hinweisen, und das kann er nur, indem er in die Zusammenhänge gegenstandskonstituierender kategorialer und begrifflicher Beziehungen selbst einbezogen ist und durch sie seine Legitimation empfängt, zur Bestimmung der Gegenstände selbst beizutragen.

9. So berechtigt es also sein mag, dass wir seit Demokrit und dann seit dem Anfang der Wissenschaft der Neuzeit, seit Galilei und Descartes und vor allem seit der durch Boyle und Locke fast populär gewordene Unterscheidung zwischen primären und sekundären Qualitäten sagen, dass unsere Empfindungen und die sie hervorrufenden äusseren Ursachen einander nicht einfach ähnlich sind, ja so sehr wir gerade, wie diese Denker, ihre Unähnlichkeit betonen müssen, so sehr hat darum doch Lotze recht, wenn er sagt, dass deshalb die Eigenbedeutung der Empfindung „nicht dadurch aus der Welt geschafft werde.“ Er trifft gelegentlich auch hinsichtlich der Farben und Töne deren gegenständliche Bedeutung schon so bestimmt, dass man sehen kann, wie allein auf Grund ihrer gegenständlichen Bedeutung die Physik sowohl in der Optik wie in der Akustik die Untersuchung ihrer Gegenstände an die Sinnlichkeit anknüpfen kann. Allerdings um den Gedanken in seiner ganzen Tiefe und Tragweite zu entfalten, darf der Begriff nicht im Sinne der alten formalistischen Prädikationstheorie gefasst werden, in der Lotze gerade in diesem Zusammenhange noch verbleibt. Vielmehr

muss er, wozu ja auch Lotze schon bedeutungsvolle Impulse gegeben hat, funktional verstanden werden.

10. Ich habe hier, wie schon mehrfach im Fortgange meiner Untersuchung gelegentlich und mehr implizite, ein Verhältnis der Sinnlichkeit zum wissenschaftlichen Gegenstande berührt, das ich zum Schluss, wenn auch nur mit einigen Sätzen, kurz explizite hervorheben möchte. Ich meine das erkenntnistheoretische. Die Erkenntnis- und Wissenschaftslehre hat zwar längst mit jener naiven Gläubigkeit gebrochen, die in der Sinnenerkenntnis einfach ein Wiedergeben der Gegenstände sieht. In diesem Sinne entfernt auch sie sich von der Sinnlichkeit. Das war bereits in der Antike geschehen. Aber dieses Entfernen darf und kann keine Preisgabe der Sinnlichkeit bedeuten. Es dürfte allein im Sinne eines Preisgebens des Sensualismus verstanden werden. Würde die Sinnlichkeit als solche preisgegeben, dann müsste die Erkenntnislehre einem blossen Formalismus verfallen. Das war ein Fehler, der in der Geschichte der Philosophie nicht selten vom Rationalismus begangen wurde, wie umgekehrt der Empirismus den Fehler beging, zu Gunsten der Sinnlichkeit die rationalen Beziehungen zu vernachlässigen. Da war es nun gewiss ein entscheidendes Verdienst Kants, dass er schon durch seine Fragestellung eine Synthese von Rationalismus und Empirismus anstrebte. Zwar hat er sie noch nicht in befriedigender Weise zur Darstellung gebracht. Immerhin hat er doch auch für sie, namentlich in der letzten seiner Kritiken, selbst Entscheidendes geleistet. Diese Synthese tiefer und weiter durchzuführen, dürfte eine der wichtigsten Aufgaben aller künftigen Erkenntnis- und Wissenschafts-Lehre sein. Nach der Abkehr und Entfernung von der Sinnlichkeit als einer blossen Wiedergabe der Gegenstände, hat sie die Sinnlichkeit gerade wiederzugewinnen, um sich des Inhaltes der Gegenstände zu bemächtigen. Nur so braucht sie auch nicht in leeren Abstraktionen hängen zu bleiben, sondern kann das Wirkliche verstehen, das immer allein in konkreter Bestimmtheit sich gestaltet. Seine Gestaltungsprinzipien, Platons ἀσώματα εἴδη liegen in den überzeitlichen Beziehungen des Begriffs, der, als Bedingung und Ziel zugleich, die Tatsachen als Tatsachen möglich und begreiflich macht. Beide, Begriff und Tatsache, sind nicht losgelöst von einander. Eben darum ist auch die Wissenschaft von der Wissenschaft, Platons ἐπιστήμη τῆς ἐπιστήμης für ihren Gegenstand auf beide verwiesen: auf Leibnizens relatio als fundamentum veritatis, das Grund und Ziel zugleich ist, wie auf die Sinnlichkeit.

WHY THE SENSA?

Harold Chapman Brown
(*Leland Stanford*)

IN discussing the relations of sense perception and matter, Mr. C. D. Broad (*The Mind and its Place in Nature*, Ch. 4) considers the possibility of granting that "the objective constituents of perceptual situations really do have all those positive characteristics which they seem on careful inspection to have" (pp. 180–181). But if this is so, he infers that we "cannot admit that the visual situations of a number of observers, who say that they are 'seeing the same object,' contain a common objective constituent." And we "cannot admit that, when we say that we are 'seeing a certain physical object,' the objective constituent of our visual situation is in general a spatio-temporal part of the physical object which we say that we are 'seeing'" (p. 181). Also these objective constituents "are not, in any plain straightforward sense, in the one Physical Space in which physical objects are supposed to be; and between pairs of them which are connected with different observers there are no simple and straightforward spatial and temporal relations" (p. 181). From this he concludes, "the objective constituents of perceptual situations are, on this view, particular existents of a peculiar kind; they are not physical, as we have seen; and there is no reason to suppose that they are either states of mind or existentially mind-dependent" (p. 181). As such unique entities they are given the name *sensa*.

It is the contention of this paper that this concept is unwarranted on the ground that the assumptions leading up to it, the "privacy" of the objective constituents of perceptual situations and the absence of spatial relations between those of different observers, rest on a misinterpretation of the facts of the case. The difficulties arise, in my opinion, from a premature introduction of the methods of mathematical logic and a lack of adequate use of physical, physiological, and psychological analysis. At one time, however, Mr. Broad is thrillingly near to a line of thought that, if pursued to the end, might have led to quite different conclusions from those he comes to accept. For example, he says (p. 185), "Perception must have grown up in close connection with action; and the primitive belief which forms part of the perceptual situation is, on the whole, perfectly satisfactory for practical purposes. It is exactly the belief that a being would naturally reach if he ignored abnormal cases like mirror images; neglected minor differences, such as we find on careful inspection, between the objective constituents of the perceptual situations of different observers who are said to be perceiving the same object by the same or different senses; and knew nothing about the velocity of light or the part played in perception by his own brain and nervous system."

Let us try to follow out this line of thinking. Physically, whatever the ontological status of colors may be, they appear as qualities of surfaces reflecting light waves, and vary according to the length of waves reflected. We may vary this surface color in any one of three ways: (1) by changing the molecular texture of the surface so that different wave lengths will be reflected, as in painting; (2) by changing the angle of incidence of the waves, really a case of changing the effective molecular texture, as in the changeable silk effect; or (3) by changing the lengths of waves permitted to fall on the surface, i.e., illuminating it by a different kind of light. Also the direction of light rays is changed on passing from one medium to another of different density, by reflecting surfaces such as mirrors, and more subtly, by electro-magnetic and gravitational fields, and we are familiar with camera effects in which a lens or small aperture refocuses light rays to reproduce colors in their spatial arrangements on some neutral field such as a wall or a sheet of ground glass. The eye is generally admitted to operate in this manner.

Physiologically the retina is a mosaic of minute sense end organs selectively responsive to different types of light rays and capable, under their influence, of initiating nerve impulses. The direct cause of their excitation is, of course, the retinal picture, but, in so far as this is a physical projection of a condition that exists or has existed elsewhere, they may be said to be excited, if indirectly, by this condition, i.e., the retinal image is an incident in the chain of events intervening between the qualitative condition of a surface and the response to the surface so conditioned.

A generally neglected fact is that there is little or nothing in the form of a preëstablished path that the initiated nerve impulse *must* follow. Bok's Law of Stimulogenous Fibrillation, the law that neuroblasts send out axones in a direction perpendicular to any activated adjacent bundle of unmedullated nerve fibers, and Kapper's Law of Neurobiotaxis, that dendrites grow toward an active neurone or nerve bundle, alone suffice to refute preformism. Furthermore, all nerve impulses tend to spread at each synaptic region and only where consequent motions lead to new sensory experiences, such as touching a visually stimulating surface, does a reinforcement of the motor path occur, such that the particular stimulus comes to initiate a particular movement and the stimulus comes to take on meaning. (I am indebted for this and much more physiological information to a preliminary reading of Dr. E. B. Holt's forthcoming *Animal Drive, Instinct, and the Learning Process.*)

Psychologically we are interested only in sense stimuli as pregnant with meanings. If we refrain from entering the realm of the miraculous, the only possible content phenomena of the perceptive situation are objects and the motor responses of the organism to objects. This, of course, involves, as one stage, the stimulus of a sense organ, and as a second stage, the innervation of action patterns that have been built up in the course of previous motor dealings with the object. It is the character of this latter stage that enables us to say that things look smooth, cold, or unpleasant. Also it is in it that the peculiar character of space experience is to be found. This experience is identical with physical space in the sense that, as anticipation of successful further action, it establishes specific physiological action plans that constitute the meaning of the idea. It is not insignificant that geometry arose historically out of experiences of land measuring.

Let us apply this analysis to Mr. Broad's problem. The phrase "seeing an object" is ambiguous. If it means "to orient oneself with respect to an object through the intermediation of the eye," there is no reason why many observers cannot "see" exactly the same object, but it is totally irrelevant whether their images are or are not identical. It is the object that has given rise to meanings as developed by experiences consequent upon experimental action initiated by it, and it is the object that may yet cause modifications or elaborations of those meanings. Hence, while established meanings may, and generally will, vary with varying sensory stimuli, they are not generated by the character of the sense stimulation. It is, therefore, a pseudo-problem that the elliptical image of a penny on the retina should mean a round penny in a certain relation to the observer's body, for a round penny is just what experience has taught us that the elliptical image means.

From this point of view the abnormal phenomena which Mr. Broad seems to think precipitate new problems, are only confirmatory evidence. The physiological plans of action that are set off by a sense stimulus, such as that caused by an image on the retina, are developed out of the usual or normal conditions of the practical situation. If a mirror reflection of light rays produces a sense stimulation identical with one usually produced by an object in a certain spatial relation to us, the motor meanings of that stimulation are naturally the ones appropriate to its usual source, as is its content. Similarly in the case of the bent stick. In double images an unusual condition of the eyes places the images in such fashion that the motor attitude induced by each image is different and we see the same thing, and its environment, in two places. Also, as we have no mechanism subtle enough to take account of the speed of light, we have no way of distinguishing cases where the image is present but its source has become extinct, as in the possible case of a remote star. To understand dreams and hallucinations we have to postulate that the organism, through its own internal mechanisms, can reenact its dealings with objects which were once present but are now absent and can effectively reconstitute their very qualities. This is not to be understood as the usual postulate of psycho-physical parallelism but is to be interpreted in a strictly physiological fashion. So interpreted, the postulate may seem to some a little strange but it is far less radical than the postulation of such curious entities as the *sensa* and has the advantage of greater simplicity since it does not lead to the complicated and unsolvable problems growing out of that dualism.

In the first place, there is now no need to maintain that sense images are "existences of a peculiar kind," neither "physical nor existentially mind-dependent." A retinal picture is physical in the same sense that the image on the surface of a ground glass in a camera is physical. In its meaning only can it be called in a measure mind-dependent, for its meaning depends, in a measure, as we have seen, on the effects of the experiences it initiates in building up paths for the discharge of nerve impulses and their organic accompaniments. In the case of vision, the camera analogy implies that the qualitative condition of the organism is probably shared by the stimulating object; whereas, in such cases as experience of heat and cold, the organic qualitative condition initiated by the sense excitation is probably not shared by the initiating object. Hence the same water may produce different qualitative conditions at the exterior surface of the organism according to different organic conditions which it meets.

In the second place, we are not compelled to assert that these sense images are not "in the one Physical Space in which physical objects are supposed to be." They are obviously not in the place where the objects of which they are the images abide, and if our actions were oriented about the images rather than about their source we should all have strange private sensory space worlds. It is quite probable that no two observers have identical sensory conditions, since they have not identical bodies or identical relations to the object stimulating the sense, but sensory meanings may approach identity and the sense conditions relative to them are in the same space with our bodies and the objects that give rise to them, in just the same sense that different photographs of an object are in the same space with the object photographed and the possessors of the photographs.

It is quite possible that Mr. Broad might prefer to mean by "seeing an object," having a retinal image from it. In this case he would be quite correct in maintaining that no two observers can see the same physical object, i.e., have identical retinal images. But this is analogous to insisting that the photograph of an object is really merely the photograph of an image on a ground glass plate. In this case we can raise the parallel objection that it is then impossible for there to be more than one photograph of the same object. It is usually considered more expedient, however, to assert that we have a photograph, or many photographs, of a landscape. Since the retinal image is so surely only a link in the set of processes emanating from an object and terminating in action relevant to it, and since the processes subsequent to the moment of image occurrence are established only by the results of explorational procedures in the past, it is a wholly inexpedient abstractionism to forget the results of this exploration and the processes prior to the image occurrence. The sense image would thus become a Hamlet, father unknown, without ghost or court. Who but a philosopher would attend the play?

It cannot even be maintained that the sense image moment of the perceptive process is marked out as of any special importance. Its organic consequences and empathic results altogether eclipse it in significance. Even the color-blind man can, under ordinary conditions, select a book or catch a train. The whole process of language learning is aimed at acquiring auditory and vocal processes that may be substituted for it by the mechanisms of the conditioned reflex and control the organic action patterns that have been built up about it. Children make the transfer by the aid of pictures and, acting as an accompaniment to reading, gradually reduce the substitute stimulus from these to throat and lip movements, and eventually to some muscle tension substitute too slight to be easily observed. Probably all of us remember being asked, "Why don't you read to yourself?" or being told to "Stop making faces when you read" and probably all of us still find ourselves trying to reinforce the meaning of difficult passages and unusual vocabularies by lip movements and symbolic acting. The successful accomplishment of this escape from the need of direct sensory contact we call conceptualization. The extent and clarity of our knowledge can only be measured by the completeness and accuracy with which this process has occurred, for concepts, in this sense, are the materials for that inner experimentation preparatory to meeting new situations which Rignano quite rightly describes as thinking.

A CONCRETE UNIVERSE

J. Gibson Hume
(*Toronto*)

DAVID HUME sets the problem when he limits the discussion to what is experienced and then defines the mind thus: "they are the successive perceptions only that constitute the mind" (Tr., IV, 6). Following Berkeley's reaction against an abstract universal, D. Hume has gone over to the opposite (apparently) of an abstract particular, not noting that this is just another bit of the same abstract analysis. Kant's reply is to accept the appeal to experience but to maintain a concreteness and a synthesis as essential within experience. Against D. Hume's pluralistic flux he says, "If each presentation stood by itself, no knowledge would be possible."

Kant's synthetical insight has become extended and developed in the succeeding schools of philosophy; in the Kantian-idealistic, of course, but also in the Scottish-realistic answer to Hume, and even in the school that followed Hume, viz., the empirical-scientific. Concurrently with the philosophical systems, the *method* in logic and the *science* in psychology have been influenced by the synthetical point of view, though the last mentioned has not been so definitely aware of this. Let us then try to trace psychological contributions to synthetical construction, citing as outstanding contributors Ward, W. James, and Royce. Ward in his *Principles*, Chap. 15, develops a statement of the self-perceiving-the-object, adding a formula S*p*O, and tracing through three genetic levels, — sensitive-appetitive, imagining-desiring, thinking-willing, — the same continuing abiding self and calling his position duality, viz., belief in two realities, subject and object, but not keeping them completely sundered as in Descartes's dualism, but rather more like Berkeley's "esse est percipi," making one bound up with the other, but unlike Berkeley giving about equal prominence to object and subject. Ward suggests, indeed, two objective realms, viz., one discovered in perceiving-imagining-thinking, the other actively dealt with in appetite-desire-willing. Royce also treats of two worlds but they are not the same two as Ward's. If we combine Ward and Royce and use Royce's terms, we will have 1, World of Description, 2, omitted in Ward: World of Appreciation, 3, indicated in Ward: let us name it the World of Reconstruction, and let us note that the World of Description is added to or modified to become a World Appreciated, and the World Appreciated is recast or reorganized in turn to give us our World of Reconstruction. The three "Worlds" are not separated entirely but interwoven. Let us examine these in turn from the angle of concreteness.

1. In the World of Description we discover qualitativeness and reflection reveals that this is an inescapable or indispensable factor.

2. But we also discover that there are many qualities and that each quality has intensity or an inherent quantitativeness. So we have quantity in two forms involved, the one less closely connected, the other most intimately and inherently imbedded.

3. The less closely connected many become related psychologically by association, viz., by similarity, contiguity, and dissimilarity. But these are intertwined, for contiguity is itself side by sides that are apart yet nevertheless have a kind of togetherness; the similars are at the same time not identical, therefore to that extent dissimilar; and the dissimilars are enough alike to be contrasted. Hence these three are really closely interwoven in their operation. Hence psychological relatedness reveals a very remarkable synthesizing function.

4. Time is a principle of the more closely related many. Hobbes noted that transition is essential incognition. Psychologically we emphasize the present, the "Now," but this is not properly represented as a mere divisional point separating past from future. Rather, as W. James said, the "Now" possesses a "thickness," a length whereby it includes two directions, one pointing back to a past, the other pointing forward to a future, and so at once involving an emergent and an expectant factor well worth remembering when we deal with efficient causality and teleological considerations.

5. Space also gives us qualitative content arranged or held together. Again it is the "Here" that is examined and it is found to involve simultaneously or contemporaneously, in any "Now" ex-

perience, several directions by the right angle method of distinction named three-dimensional. Other dimensions may be merely non-spatial additional considerations. It is true that in experience space and time are coöperant, yet Berkeley is wrong in virtually reducing space to time.

6. Substantiality by abstract analysis became in Locke "something we know not what" and this is repeated in later "agnostic" expositions. But concretely, substantiality must be found in some way within the known. Kant insists that it is the persistence through the qualities known, the permanent through its changing manifestations; but Kant adds an unknowable "thing in itself" for the reality, thus reverting to Locke. But should we not refuse to make the known illusory or unreal, then the persistence of the appearing is the persistently remaining reality. The ice is real, not because it never changes, but because it reappears and becomes water.

7. Causality, in Locke and Berkeley, is "Power" and is at length identified with volition. It is, accordingly, denied by Hume. But though volition is properly eliminated from the object, yet action of some kind seems to be required. If we make this merely external push, we mechanize everything. Kant, however, gives us a hint. When we get a changing yet persisting substantiality, the order within this changing substance is our causality. If we see the whole cosmos as orderly and coördinated in all its variations, this gives us our general "law" of causality. When we correlate one set of changes with another in detail, viz., ice changing into water, interconnected with rise in temperature, then we get the particular cases of causation or particular causes. We do not get our "uniformity of nature" (Mill) by an induction of the particulars; rather it is involved in the conception of nature as a real ordered connected cosmos. Substantiality and causality must then be taken together.

8. Turning now from object to subject, how shall we proceed? We first get our object world whether of Description or Appreciation or Reconstruction as in each case discovered or evaluated or reorganized by an action or activity. It is the reconsideration of these activities that forms our next starting point. If Kant and Ward be correct, we discover reflectively a persistence or continuance or an abiding agency. Locke was trying to express this view of the self in his chapter on personal identity (II, 27). Like substantiality in the objective field, it is not abstract unchanging identity but continuity as abiding through the changing; here, the changing activities of knowing, appreciating, reconstructing.

9. It is obvious here, as Ward insists, that any attempt to dis-

cuss any acts or activities of a subject apart from the subject is purely abstract and partial. The act is always subject-acting-so-and-so and always dealing with some objective content, either the content which makes up a world of description or one in a world of appreciation or one in our selected and reconstructed ordering, and it is easily seen that the subordinate rôle of the subject in the descriptive field becomes changed to a closer equality between subject and object in appreciation, while in reconstruction the subject takes the lead and dominates the content-dealt-with.

10. We may now use our results to restate old problems. Outstanding and primary is the puzzle of the relation of subject to object and of subject-acting to object-causality. Following the concrete, we may start with simpler aspects of the world of description and ask how the more complex are related to the simpler.

(a) Qualitative content in space and in motion gives us our mechanics, but we soon discover other "motives" besides mere change of location in space, viz., light, heat, electricity, crystallization; and recent science tries to express the ultimate unit in such a way as to make it both mechanical and electrical and suitable as a basis for heat and light. Even in physical science the early Greek atomic theory is too crude and too simple and too analytic to be quite satisfactory. Concreteness has invaded our most fundamental and simplest science.

(b) But botany and vegetable growth seem to be quite different. The "missing link" device is just to dodge the difficulty and place chemical action midway between the inorganic and the vegetable organic and let it go at that.

Recent "Emergent Evolution" in Morgan, etc., gives a helpful suggestion. Instead of a series of separated levels, let us rather regard the first and simplest as a basis to be reorganized in the next stage. So the inorganic becomes chemically transmuted. The chemical is biologically reconstituted and the biological is at any rate both modified and guided through consciousness which in turn is developed into a level where it becomes explicitly previsional and effective as described in Ward's "re-organization" level. This scheme meets many of the difficulties of the older evolutionary presentations and opens the way to a reconciliation with the volitional and idealistic speculations. Furthermore, if consciousness immediately and directly influences life and explicit or self-conscious activity can modify this simpler consciousness, it may thereby indirectly gain control over life and whatever life in turn controls.

11. Lastly, David Hume's dictum, "Whatever is distinguishable

is separable," may need much careful reconsideration. That we need to secure "separation" to some extent is obvious if we are to leave any room for moral situations. On the other hand, "separation" overdone gives us our dualism and other philosophical nonsense-problems. We will not seek the much overworked "identity." Even "unity" is too ambiguous. We should seek a oneness, a unison of the real constituents or factors. This "unison," as we have seen, may be of very many levels or degrees or complexities.

SECTION 2

Time: Wednesday, September 15, 9.30 A.M.
Place: Standish Hall Common Room
Subject: The Doctrine of Subsistence and Essences in Current Logic and Epistemology
Chairmen: G. A. TAWNEY, Cincinnati
EDMUND H. HOLLANDS, Kansas

ESSENCE AND EXISTENCE FOR CRITICAL REALISM

R. W. SELLARS
(*Michigan*)

THE topic I am to help discuss is a challenge to fundamentals. Both terms, essence as well as existence, are basic and have been so regarded since philosophy reached full consciousness of its task. As I interpret the intention of the Committee, we who have undertaken the discussion of this topic are supposed to emphasize the intersection of epistemology and ontology. In what follows I represent that trend which is usually called critical realism.

It has seemed to me that the topic naturally falls under the following heads: (a) What an essence is, (b) what we should mean by existence, (c) what the relation between essence and existence is in the case (1) of acts of cognition and (2) of the object known. It will be impossible to keep these questions entirely distinct but my emphasis will take this order.

The term, essence, had for both ancient and mediaeval thought an ontological significance which was challenged by nominalism. Into the history of the varying fortunes of this struggle we have not the time to enter. But it should be pointed out that the controversy is as vital a one today as it ever was. On the whole, the new realism has been realistic in regard to essences and universals while critical realism has been divided on this point. I myself belong to the more nominalistic wing.

It must be admitted that the development of mechanical principles in science militated against the teleological theory of forms. There was at the same period a greater emphasis upon space and time. Those who wish to get the full import of the older tradition must turn to Aristotle and St. Thomas. For St. Thomas, an essence is a distinct reality which, in the actual world, is united with existence. Universals are *in re*.

But, as is well known, the displacement of rationalism by empiricism was accompanied by the rise of what may be called psychological nominalism. Philosophy went into the melting-pot. One of the most striking features of this period was the appearance of idealism in its modern sense of rejection of physical realism.

The adjustment of logic and theory of knowledge to psychological nominalism was hindered by the atomism then prevailing. Neither the active nature of thinking nor the configurational unity of consciousness was sufficiently appreciated. And we must also remember that the dominance of idealism, or phenomenalism, involved the rejection of the transitive claim of knowing.

To sum up: philosophy paid a high price for the rejection of the older type of rationalism and the ontology which went with it. Yet, in my opinion, there could be no turning back. Only very slowly has a new perspective arisen within which the old, basic questions can again be asked. Can we be nominalists and yet be physical realists? What do we hold before our attention in knowing, and how do we grasp the object?

In any specific claim to knowledge of an object, reflection leads us to distinguish between the total act of cognition and the object cognized. But differences of opinion have arisen among thinkers as to the nature of the act of cognition. The new realist maintains that the object is literally given in the field of consciousness and may even hold that it consists of universals in a spatio-temporal position. Consciousness is here taken in the panobjectivistic sense, not in the traditional, empiricist, pluralistic sense. The critical realist, on the contrary, holds that it would be more exact to say that the object is cognitively given, or known, but not existentially given. Knowing, it is maintained, is transitive and involves a grasping of the nature of the object by means of abilities and qualities in consciousness. To understand the nature of this cognitional transcendence, which yet does not violate the existential locus of consciousness, is to have the key to epistemology.

The thesis of the critical realist is essentially this: in knowing, we grasp the characteristics of the object in terms of specific characters held before the attention in consciousness. I have been accustomed to say that we intuit these characters and know the object. But I have found that this way of stating it leads to misunderstanding. I wish to emphasize the directness of knowing and the specific dominance of the whole cognitive act by the sense of an object. At the same time, I hold that this concrete interpretative sense of an object does not involve the actual presence of the object. In other words, the characters which we can discriminate in knowing are sustained by the mind but develop within it as it strains toward the object. The act of cognition is primary and it is only later that we may dwell upon the content of knowledge as a set of characters in their own right. This context was ignored by early empiricism with its too great simplification and its false notion of introspection which ignored configurated activities of the mind-body.

Because of the very directness of knowing, that which mediates it and makes it possible may be lost sight of as in common-sense realism. Common-sense realism expresses the directness of knowing without appreciation of the processes and factors upon which it rests. And we must also remember that the lower level of knowing is pragmatic and personal. Pure cognition is an achievement.

The necessity of a position between traditional representative realism and the new realism seems to me undeniable. We look interpretatively through the characters in the field of consciousness at the characteristics of the object. Categories like thinghood and relations dominate our consciousness. It is this complex content of thought which reveals the object. We may say that in knowledge we automatically postulate a cognitional identity between the characters in our thought and the characteristics of the object. We meet here with the ultimate claim of knowing.

Error must be accounted for along the same lines. Doubt means that we are uncertain whether the characteristics of the object we are trying to know are identical with the characteristics we have been assigning it. This possibility implies that the characters which are mediating our knowing may not be revelatory of the object and the characteristics we assign may not be its actual characteristics. Into the subject of the criteria we use to distinguish between error and truth in particular cases we cannot at present enter.

It should be noted that the critical realist seeks to do justice to the part played by the individual organism and mind, while stressing the directness of knowing. Knowing is, in short, a specific kind of event which cannot be reduced to a compresence of organism and object but rests upon abilities and developed contents. When an object is cognitionally given, or known, it is not existentially given, that is, does not enter consciousness. Thus I can know a past event, though, as event, it no longer exists. Pointing, meaning, interpreting, these are actions of an organism to which the whole range of consciousness is intrinsic.

Having, I hope, sufficiently outlined the standpoint of critical realism, let me now examine the status of the characters, or essences, which mediate knowledge of the characteristics of objects.

It seems to me that these characters must be taken at their face value as features of experience. In interpreting an object I become aware of colors, shapes, relations, etc. I can hold these data before my mind and, in cognition, they function as the qualities and relations of objects. In themselves, they are just specific characters upon which I can dwell if I so desire.

The psychology of this situation has been much discussed. The traditional view broke up consciousness into a flux of entities called sensations and images. I am very skeptical of this mosaic notion of consciousness and prefer to take a complex pulse of consciousness as an intrinsic feature of a complex mental act. We are literally within consciousness in awareness, and it is just an empirical fact that we can discriminate colors, shapes, and positions. The existential standing of consciousness takes us to the mind-body problem, and I may mention the fact that I regard consciousness as a qualitative event within the brain-mind. It is a configurated event with the subject-character-object structure. May I confess here that I have always felt that C. A. Strong created many of his difficulties by reason of his panpsychism? I take the flow of experience at its face value as consciousness. If you will, the vehicle of it all is the functioning mind-brain.

Should we call these specific characters universals? Is this red which I experience in perceiving this particular book a universal? I cannot see that it is. Only as I have a sense of other instances and note and more or less symbolize what they have in common, do I achieve a true universal. It is then that an instance secures additional meaning. I confess that I am a nominalist in these matters and regard a universal as a product of abstraction, comparison, and symbolization. We develop a sense of other instances of the *same* quality or of the *same* relation. And in the use of the term same, I summarize the result of comparison. Because it is the very nature of the mind to make surveys of various instances of knowing, the sense of recurrence bulks large. Language, also, enforces this appreciation of qualitative identity. And yet we should never oppose the universal to the specificity of the character used in knowing an object. The significance of the universal for epistemology has, I am persuaded, been much exaggerated.

Let us turn our attention to the question of existence. There are three meanings which should be distinguished: (1) existents, the denotative meaning of the term, (2) being, in the sense of the actual stuff of reality, and (3) tests which we apply when there is doubt as to the acceptance of an object as an existent. Clearly meanings 1 and 3 go together. Does an object exist? This means, Is it to be found in the class of existents? And the tests applied are usually causal efficacy and presence in the space-time system of which we are a part. Ultimately, our accepted existents grow around the things to which we react in a bodily way.

An existent is known in terms of its characteristics, such as structure, shape, behavior. It is also in relations to other existents. Must we not regard these characteristics as intrinsic to the existents and as specific as they are? If so, we should not speak of essences as embodied in existence. Essences are *post rem.* The nature, or *quidditas*, of a thing is seamlessly one with it. A thing is structured, shaped, etc. I may call myself an ontological nominalist. There is existential diversity, otherness, plurality. Things can exist which are alike as two peas. Yet they do not participate in a common universal. But we who know them can compare their characteristics and make them instances which we bring under a universal in our thought. But knowing may precede and does not depend upon such classification. In short, I am reluctant to speak of universals *in re.* I regard it as truer to say that each thing has its specific, intrinsic characteristics which can be revealed in the specific characters which we hold before the mind in an act of cognition. A thing is not a union of essence and matter. It is only our unavoidable approach to things through knowledge that suggests such a dichotomy.

Perhaps my point can be made from another angle. If we no longer regard characters as a peculiar kind of entity which can exist both before the mind and in things, but merely as a discriminated feature which reveals the characteristics of things, we are less apt to create an unreal difficulty for ourselves in our thought of things. We all remember the confusion into which Locke was led and which Berkeley so mercilessly exposed. Characteristics are not external to things and stuck on them like labels. Instead, they are intrinsic to them and expressions of their energies. To know them is to know things.

One other point calls for treatment. Critical realists have been much criticized for the assertion that the *being* of things cannot be given. But this is just an obvious implication of their epistemology. If knowledge is mediated by characters in consciousness and the object is selected and meant but not existentially given, we must hold knowledge to be a peculiar substitute for being. It is a revelation of the object and not the object itself. It is the object which acts and has energies and not our knowledge of the object. Here is where the notions of substantiality and existence enter, which purely logical and immanentist theories have found so baffling. Cognitional givenness is not existential givenness. Knowing falls short of being. Those who are naturalistic enough to admit the organic locus of knowing in human individuals will readily realize that knowing must be different from being. Here we have an ultimate situation and contrast. From the ontological point of view, being, rather than knowing, is primary.

Let me in conclusion summarize my results. We took the complex act of cognition as the epistemological unit. The knower, we saw, is on the inside of this act looking at the object. The object is meant and is given cognitionally in that its characteristics are revealed. Reflection shows that this revelation is mediated by the content of thought which consists of characters which can be discriminated. Our thesis is that these characters are specific and should not be spoken of as universals, though they are the foundation of universals. It is the mind playing upon them, symbolizing and summarizing them, that makes universals. These characters are intrinsic to the pulse of thought which we called the act of cognition. And here we were empirical and inclined to criticize much of past introspection as disintegrative. Passing to the object known, we likewise criticized the doctrine of universals *in re*. Things possess their own specific characteristics which are also intrinsic to them and expressions of their energies. Knowledge does not require the presence of an identical something in mind and in object, as has been so long the belief, but only the cognitional value of characters in the act of cognition, a value which has its foundation in psychophysical conditions.

"EXISTENCE" AND "SUBSISTENCE" IN CONTEMPORARY LOGIC AND EPISTEMOLOGY

R. F. A. Hoernlé
(*Witwatersrand*)

1. My contribution to this discussion will be divided into two parts. In the first part I shall attempt a systematic synopsis of the various problems into which our topic has been broken up in contemporary discussion. So far as I am acquainted with the literature, this has not yet been done. In the second part I shall briefly outline the point of view from which I would approach the topic.

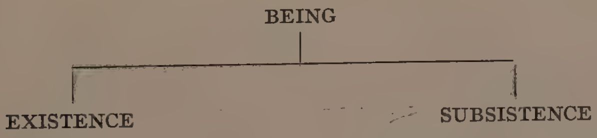
2. There are three headings under which we may conveniently arrange the various problems connected with our topic, viz., A. *Classification of Modes of Being;* B. *Gegenstandstheorie;* C. *Special Problems of Existence.*

I

A. Classification of Modes of Being

3. The problems under this heading result from the realistic *motif* of distinguishing the "being" of objects from their "being for thought," or, in general, from their "being apprehended by a mind." In other words, the principle is that objects must *be* before they can *be perceived or thought.* This realistic declaration of the independence of objects in general leaves the field free for an exploration of the realm of being, *as such.*

4. At the very least, such an exploration is held to yield this result:



Certain other terms, like "actuality" and especially "reality," are variously used as synonyms for one, or even all, of the terms in the scheme.

5. The *summum genus,* "Being," obviously ranks as indescribable and indefinable. Even to say that a thing must *be,* in order to have qualities or to stand in relations to other things, is to treat "being"

as an indefinable *prius*, which by implication is not a quality, nor a relation, and therefore *sui generis*.

6. Existence and subsistence, on the other hand, must admit of being defined.[1]

(a) The favorite definition appears to be by means of the kinds of objects to which these two modes of being respectively belong. Existence, we find it said, is the mode of being proper to "particulars" or "substances," whereas subsistence is the mode of being proper to "universals," i.e. (on the usual view), "qualities" and "relations," *as such*, or considered apart from the particulars which they qualify or relate. But this definition throws us back on the difference between "particulars" and "universals," and when we ask what this difference is, most writers tell us that it consists in that particulars "exist" whilst universals "subsist" — a manifest circle.

(b) If we define existence as "having a position in space and time," we can define subsistence only negatively as "having no place in space and time," which is by all logical canons of definition unsatisfactory. Moreover, we run up against the difficulty that universals not merely subsist as such, but are "realized" or "embodied" in particulars. As thus realized or embodied, they presumably share the existence of the particulars. But those who split up the universe into existent particulars and subsistent universals never explain to us how a subsistent universal can be conceived to be realized in an existent particular. A third difficulty in the definition of existence as "having position in space and time" is this, that either space and time themselves exist or they do not. If yes, do space and time themselves "exist" in the sense of having position in space and time? This seems meaningless. If no, then do space and time perchance "subsist?" But that would be to define existence by subsistence.

(c) If we define existence as the mode of being proper to objects of actual or possible sense-perception, and subsistence as the mode of being proper to objects of conception or thought, we get into analogous difficulties. For, we are once more threatened with a purely negative definition of subsistence, in that it is difficult in this context to give to "conception" or "thought" any other meaning than "the mode of apprehension proper to objects which by their very nature are not perceptible by the senses." Moreover, objects of sense-perception have qualities and are — so it would commonly be said — perceived to have them. And, similarly, they stand, and are perceived to stand, in relations. In short, universals as realized in particulars are perceived in particulars being perceived. So, once more, the fact that universals are realized in particulars wrecks the definition.

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[1] Dr. C. D. Broad (*Mind and its Place in Nature*, p. 18) denies that existence can be "defined," but gives instead an "unambiguous description." It makes no difference to my argument whether the points which follow are considered to be attempts at definitions or at unambiguous descriptions.

(d) There is, finally, the logico-metaphysical way of defining existence as the mode of being proper to whatever, for logic, can function only as *subject* in a proposition, never as predicate, and, for metaphysics, to whatever is *substance*, and, as such, self-existent, as distinct from what is attribute or relation. Subsistence, then, would be the mode of being proper to logical predicates and metaphysical attributes. This view gets into difficulties, e.g., with abstract terms and with imaginary objects, both of which seem able to function as logical subjects, yet are not easily regarded as self-existent substances. Again, what is and what is not a substance, and whether there can be more substances than one — these are questions which have vexed many generations of metaphysicians. Certainly, McTaggart, in his *Nature of Existence*, lists as substances many things which no other philosopher has ever been willing to acknowledge as such. Lastly, there is again the problem arising from the realization, or embodiment, of a quality or attribute in a thing or substance. Can we escape the necessity of acknowledging that a quality realized in a substance has a different mode of being from the same quality considered as such? Indeed, is not the traditional view precisely this, that for a quality "to be" is for it to inhere in a substance, thus partaking through the substance (as the *essentia* or "nature" of that substance) of the mode of being of the substance? Thus, here again, the divorce of existent substances from subsistent attributes ignores undeniable facts.

Before I leave this first heading, the reminder is perhaps in place that the synopsis which I have attempted to give does not claim to represent the view of any single thinker. It stands for a type of view, with a central principle and alternative (or concurrent) developments of that principle. For every detail I can quote chapters and verse; but the type in all its developments is not, I think, to be found in the writings of any one contemporary philosopher.

B. GEGENSTANDSTHEORIE

7. The title of this heading is, of course, borrowed from Meinong, but as I use it here, it is not meant to be restricted to the writings of Meinong himself or of members of his school. I use it to cover all

theories of which the *Leitmotiv* is akin to Meinong's famous protest against the "prejudice in favor of *Wirklichkeit*." Emancipation from this prejudice opens the door into *Gegenstandstheorie*. Alternatively, I might take as the basis for my synopsis under this heading Dr. C. D. Broad's thesis that "the first great division within Reality as a whole" is that between "the part which *exists*" and "the part which is *real but not existent*." The problem here is to list the various kinds of objects which are to be found in these two "parts of Reality as a whole." Inasmuch as the interest of *Gegenstandstheorie* has naturally tended to be concentrated on the objects which are real but non-existent (= subsistent), I propose to list here only the latter.

8. Such a list, compiled from contemporary discussions, especially among English thinkers, will show a somewhat miscellaneous collection, as follows:

(a) *Universals* as distinct from particulars — the difference between them being generally described as ultimate and irreducible.

(b) Objects of *dreams* and *hallucinations* — in general, we might perhaps say, objects "non-existent" (popularly called "unreal"), but liable to be mistaken for existent ones.

(c) Objects of *imagination* or *fancy*, recognized as such in the act of imagining itself (which cannot be said normally, or necessarily, of dreams or hallucinations). Everything from the objects of day-dreams to the works of creative imagination is included here. The qualification, "recognized as such in the act," is necessary in order to exclude the use of imagination in memory or scientific thought, i.e., objects apprehended by imagining but judged to belong to the realm of what exists or has existed.

(d) *Numbers*, *propositions* (including Meinong's "objectives"), and other logical entities, if any.

(e) *Possibilities*, in Professor G. F. Stout's sense of unrealized or unfulfilled alternatives within the structure of Reality as a whole. Perhaps plans, purposes, ends of action, prior to being carried out, or "brought into existence," should be listed here.

(f) *Data*, especially *sense-data*, if Santayana's theory is accepted that all data are "essences," and, therefore, that no datum exists, existents being known only by "animal faith."

This list makes no pretense to exhaustiveness; my purpose is served if it illustrates the miscellaneousness of the universe from the point of view of *Gegenstandstheorie*, and thereby the range of grounds on which we may legitimately refuse to limit the universe, or Reality as a whole, to what exists.

C. Special Problems of Existence

9. Under this heading I propose to group a number of problems which are not connected with the difference between existence and subsistence, when each of these is considered as a mode of being, or as a realm of objects, but which arise in the attempt to think out the nature of existence *by itself*. It is in this sense that I call them "special." Beyond this, I can think of no single principle to supply a connecting link between them.

(a) First, there is the meaning of "existence" when predicated of "the Universe as a whole," or, in the ontological proof, of God. We can certainly not identify existence in these contexts with sensuous perceptibility, or with position in space and time. On the contrary, it appears to be synonymous with "being." On this view, it would be best to keep "being" as the proper term to be applied to the Universe as a whole, or to God in the ontological proof, and to limit existence, subsistence, etc., to special modes of being, or special areas of objects in the whole.

(b) Secondly, there is the use of "existence" as a concrete name. "An existence" (plural, "existences") is a synonym of "an existent" or "an existing thing." Now in every existent an "essence" (universal) is realized. Thence spring two problems.

(1) If essence and existence are held to be "essentially," or logically, distinct (so that essence does not imply existence), we require a reason why a subsistent essence in one or more instances passes into existent embodiments. Are we quite sure that the essence does not contain at least part of the reason, especially if it be taken, not in isolation by itself, but in its *essential* relations to other *essences* in the universe? We are here brought back, once again, to the old problem of the realization of the "universal" in the "particular" which is so curiously and strikingly ignored by all theories which labor simply to divide up the universe into realms of objects with different modes of being.

(2) The other problem is: Is there any difference among essences in respect of the completeness with which they are realized in existents which are objects of sense-perception? Such a difference, if there is one, would be, as differences between essences should be, an *essential* (*wesentlich*, in Husserl's sense) difference. It leads to the question, how much of the nature ("essence") of an object of sense-perception can be said to be strictly *perceived*. The object exists, presumably, in its full nature, yet sense-perception, even when liberally interpreted, may reveal only a poor fragment of its

full nature. If this be so, can we look to perception as the one, or even the decisive, source of evidence for the realization of an essence in an existence?

(c) Thirdly, there is the problem of the "existential import" of the copula in propositions. This may be disposed of summarily by saying that "is" must be understood to import, not merely "existence" as distinct from other modes of being, but any mode of being which is demanded by the nature of the terms of the proposition, in the context in which the proposition occurs.

(d) Lastly, where "existence" is taken to mean *temporal* existence, or position (appearance) in the time series, a special problem arises from the distinction between the present as existing, the past as no longer existing, and the future as not yet existing. Thinkers who use "to be real" as a synonym for "to exist," are wont to call both past and future "unreal" from the point of view of the present which is alone "real." But, if past and future are non-existent and yet are not nothing, then they must have some other mode of being, say subsistence. The result is the paradoxical one that the realm of existents, if conceived as including past and future events, is made up of a thin section which strictly exists — in terms of experience, the "specious present" — dividing from each other two infinite realms of subsistent entities.[2]

II

10. After this survey of contemporary discussion, I must try to indicate briefly my own way of dealing with the problem. And when I say "my own," I mean merely the way which, on the whole, commends itself to me as the best, i.e., as the truest, the theoretically most satisfactory. I must not be understood to assert that it is novel, or that it has originated with me. On the contrary, I believe my views to have come to me from thinkers whom I gladly acknowledge as masters. But I have made it mine by thinking it over for myself and finding it the best available. Whether I have understood the masters is, of course, another question, and the possibility that I may have failed to do so may serve as a further excuse for calling the view I am about to present "my own."

11. First of all, I propose to be in earnest about the phrase,

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[2] Dr. C. D. Broad, in *The Mind and Its Place in Nature*, puts forward the interesting suggestion that events, once they have happened, have an "eternal existence." Unfortunately, he does not explain what he means here by "eternal"; nor whether, and, if so, how "eternal existence" differs from "subsistence"; nor whether *future* events have the same eternal existence, before they actually occur.

"Reality as a *whole*." By a "whole" we are agreed, I take it, to mean a *unity of differences*. By "unity," in turn, we mean that the differences are not conceived simply to co-exist, but to be essentially, or necessarily, connected. Another way of putting this is to say that the differences do not merely happen to be together, as if each could be, and be what it is, if the others were absent, or were other than they are, still less if there were nothing else at all. Whether we should call this principle an axiom, a postulate, or an assumption, I do not care to argue. To me it is the explicit formulation, by reflection, of what we take the nature of Reality to be in our endeavors to *know* it. Knowing begins with finding miscellaneous differences simply together. It passes on to find connections between them such that one cannot be without another, or such that given one, another must be. Whatever our errors in the effort to trace such connections, whatever the present limits to the success of our efforts, I hold that the principle on which knowing here proceeds expresses the nature of the Real which we seek to know.

12. The application which I propose to make of this principle in the present argument is this: Differences must be distinguished, but they must not be divorced or treated as self-existent. Distinguishing them is necessary if we are to know Reality in detail as a whole articulated into differences. Divorcing them is fatal, for it destroys the "whole." Hence, the purely analytic procedure which "divides" modes of being (e.g., *subsistence* and *existence*) or kinds of objects (e.g., *particulars* and *universals; existents* and *abstracts*), and leaves the results of such division as the last word of philosophy on the subject, is not ultimately satisfactory. Its results have relative truth, but cannot stand as final, as not to be touched by further interpretation. For — and this is an important point — the results as offered are always charged with interpretation, and to that extent they may be wrong, and are at least open to challenge. It is one thing to recognize, or admit, a difference. It is another thing to admit the interpretation of that difference, the theoretical terms in which it is expressed. E.g., the words "particulars" and "universals" call attention to a difference. But it is a further question whether the difference is to be conceived (interpreted) as a difference between two kinds of objects each with its own mode of being. To deny this conception, or theory, of *what* the difference is, is not to deny *that* there is a difference. Yet the two denials are frequently confused in philosophical controversy, with the result that a thinker who denies that Reality can be divided into existent particulars and subsistent universals is accused of denying that there is any

difference between them at all. Yet, his sole purpose in his denial is to make room for another theory, another way of conceiving the nature of a difference which, as a fact, is common ground between the disputants.

13. Thus, when I am told that the difference between particulars, as existent, and universals, as subsistent, is "ultimate" and "irreducible," I find the assertion ambiguous. I admit it in one meaning of the words. I deny it in another meaning. All differences, I should say, are "ultimate" in being just the differences they are. *That* there is a difference is an ultimate fact. But it does not follow that a given theory of *what* that difference consists in is also ultimate. And so I should certainly dissent from the assertion that the difference between particulars and universals is ultimate, if this means a conception of their difference which is reached by ignoring, or forgetting, that universals are first found realized in particulars, and which makes any intelligible theory of the universal realized and individualized in the particular very difficult, if not impossible.

So, again, every difference is "irreducible," if that means that it cannot be denied or argued away. But if it means, as I suspect it may be intended to mean, that different things can, in principle, not be treated as differentiations of a unity, once more I dissent. And I base my dissent once more on the appeal to the nature of Reality as it progressively reveals itself to our knowledge. Any law asserting a necessary connection between different terms, any system realized through different members, supplies an instance to the contrary. In those instances we can discern a formal character of Reality — part-ground of calling it a "whole" — which we must affirm in principle, not because we can as yet, or shall ever, see it verified in every detail, but because (1) it is being verified in every fresh extension of knowledge, and (2) without it knowledge would be impossible, i.e., there might be apprehension of a chaotic, meaningless flux of sense-data, but there could not be either science or philosophy.

I repeat, to conceive Reality as a *whole* is not to deny any differences, but merely to deny any interpretation of the differences actually found which would make this conception of Reality impossible. To think of Reality as a unity of differences requires us to welcome all differences there are — in fact, the more, the merrier. But it requires us also so to conceive them that, as far as possible, they appear as differentiations of the whole. It is by way of keeping this second requirement steadily in view that I prefer to treat the difference between existence and subsistence, or between particular and universal, as a difference between *aspects* of Reality rather than between modes of being or classes of objects. "Aspect" may be a vague term, and I wish I could think of a better: but it is at least a convenient reminder (which the other terms are not) that the differences belong to a unity, and that the problem of conceiving them as differences of that unity is ever present. Similarly, a division into "classes" seems absolute and final: "aspects" are essentially relative.

14. From these methodological generalities, I turn to concrete detail.

We should begin, I think, where knowledge in its most rudimentary form begins — with "simple apprehension," "immediate experience," with "what is presented,"— with "acquaintance" (or whatever other language may seem most appropriate). Of what is directly apprehended I should say that it is always a *this-such* — a "this" and a "what," the embodiment, or realization, of a universal or of universals, The given has these two aspects, and when we learn to distinguish them, we generalize their difference by means of the words "particular" and "universal." And, again, it is only after we have recognized the difference that we reassert the unity in which the difference of aspects was found, by some such phrase as "embodiment of the universal in the particular."

15. But the phrase conveys more than this. Immediate apprehension is always of a manifold or a field within which attention, in being attracted by "this," reveals a structure such that "this" stands out against a background, by comparison undifferentiated. The next step is for attention to shift from "this" to "that," or within the original "this" to distinguish "this" and "that," e.g., different sounds as constituents of what was at first heard simply as a noise. But always that which is in the focus of attention has the two aspects of "this" and "what" (simple or complex). Thence spring further identifications, differentiations, and constructions. "This" and "that" may show each its own "what," but "that" may also be "another instance" of the *same* "what" as "this." And it is only when *one* "what" is distinguished from *another* "what," or the *same* "what" is identified in different "thises" (so to speak), that the "what" aspect comes to be conceived as a universal (or essence), capable at once of embodiment in different "thises," and of essential relations to other essences. And "thisness" itself is now seen to be a universal, and so is "difference" or "sameness," or any other relation.

16. But throughout we have a development of *aspects*, originally given together as differences within the given. The *principium individuationis* appears to be, at first, simply that prominence (to whatever it may be due) of one item in the given manifold which attracts attention. It is only after different items have been discriminated by each in turn becoming the "this" of present attention, that they can be individualized further in a conceptual scheme of positions in space and time.

17. Two further points: (1) "This," and "this," and "this" . . . , each prominent within a background at once continuous and changing — does not such a situation, reflected on, lead us to conceive of the different "thises" as all aspects of one inclusive THIS, "this universe," "this Reality which reveals itself in all our experience?" And, if so, must we not discern and acknowledge in, and beyond, the immediate "this" of present attention and judgment the inclusive THIS which is the "ultimate subject" of both? And, similarly, are not the several "whats," each primarily attached to its "this," ultimately elements in the inclusive "What" (the nature or character) of *The* (= this) Reality as a *whole?* Here, again, is a contribution to what is meant by speaking of "Reality as a Whole."

(2) I should not say of a "this-such," considered as an original datum, that it "exists," because I think it better to keep "existence" as a word for what common sense calls "real" as distinct from "unreal." But "existence" in this sense is obviously limited, and as obviously (so at least, I think, previous discussion has shown) not conceivable in any self-consistent way. Reality as a whole will include more than what exists, and what exists is, taken by itself, an aspect of Reality which, *as such*, is not ultimate. I should say the same of "subsistence" and "what subsists," a universal, taken by itself, being once more an aspect which is certainly not nothing, but which has not the ontological status of the universal realized or embodied. Reality as a whole, conceived as a "this-such" on a large scale, as a self-consistent system of essences embodied or realized, has the mode of being with which any "this-such" given in experience makes us acquainted.

18. Within some such theoretical framework as this, we can, I submit, do justice to the difference between existence and subsistence, not only so far as it coincides with the difference between particulars and universals, but also so far as it affects the other "real but not existent" objects of *Gegenstandstheorie*. Were I to attempt this in detail, I should exceed, even more than I have done

already, the time allowed to me in this discussion. Only by way of brief, and altogether inadequate, illustration I would mention that, e.g., the theory of numbers and, in general, of mathematics, seems to me to take its start from essences found embodied or realized, next discriminated, and then considered apart ("abstracted"), and in this isolation developed into ramifications dictated by their own inner, i.e., essential, necessity, without reference to embodiment. Yet, we ought not to forget either the actual applicability of mathematics, or the way in which, e.g., physical problems constantly occasion the development of fresh mathematical concepts and methods for their solution.

19. I will conclude with a final argument which, to my mind, carries no small weight. Let me put it in form of two questions: (1) If we distinguish particulars and universals as two different kinds of objects, of which the one exists, the other subsists, how are we to deal with the "this-such" in which the distinction of "this" and "such" affords a basis, indeed, for the predicating "such" as a *quality* of "this" whilst yet not amounting, as given, to this relationship, nor to the diverse ontological status subsequently ascribed to substances and qualities? (2) And, after we have developed the two aspects into particulars (or substances) on the one side and universals (or qualities) on the other, can we give any intelligible accounts of how a subsistent object can qualify an existent one, or what "realization" of a subsistent object can mean?

At any rate, the current treatment of our topic seems to me blind to such problems as these, and it is just because it keeps these problems in mind that I venture to put forward a view such as mine as an alternative worth exploring.

THE PHILOSOPHICAL ATTITUDES AND THE PROBLEM OF SUBSISTENCE AND ESSENCE

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I THINK it cannot be our task to solve in twenty minutes the problems of subsistence and essence — problems for which the greatest philosophers could not find answers which satisfied future generations. What we can do is something different. We can ask *why* these answers were so unsatisfactory. We can ask, Why do all these different answers so often repudiated always arise again and again? We can ask why the gap between nominalistic and realistic views has never closed in the course of the centuries, since the days when Antisthenes ironically replied to Plato, "I see no horseness but only horses," and Plato rebuked those who are only satisfied with what they can grasp, viz., oak trees and rocks. Why — we have to ask — did even Aristotle's energetic mind not find another way of solving the problem of essence than by supposing individuals to be primary substances and universals to be secondary substances?

The answers to these questions cannot be given by examining once more the reasons offered by the different standpoints — especially as no really new arguments have been offered since the days of the Middle Ages, but only the old arguments turned in new ways. If in the history of philosophy such repetitions of old arguments occur, we may always be sure that these arguments are not the real foundations of the opinions for which they stand, but that they are the outcome of different mental attitudes, of different ways of looking at the world. We, therefore, cannot understand the arguments, if we do not know the mental attitudes for which certain reasons alone had a meaning and for which the opposite reasons were nonsense.

If we make a survey of the different reasons given for or against essence and subsistence in order to find the background out of which they are derived, we find three sets of arguments:

(1) The naturalistic arguments which have a meaning only for a naturalistic attitude.

(2) A group of arguments which arise from the analysis of logical phenomena; these come from the so-called "phenomenological attitude."

(3) The third group does not require a special attitude towards the world, but takes its origin from the results of natural science.

We shall postpone the discussion of this third group of arguments and consider first only the arguments which arise out of two contrasting attitudes: the naturalistic and the phenomenological attitudes.

What is the difference between these attitudes?

The naturalistic attitude takes its starting point from the external world. It does not ask how we get knowledge of this external world; it accepts it as real without questioning. It accepts individual real things, and only individual real things. This attitude is the well-known attitude of natural science. In the first instance, the physical world is real for it; physical existence is the form of existence which is the basis of all else. Yet for most adherents of this view, there is still a second world of existence, the psychical world. In connection with the brain another realm of facts arises besides the realm of physical facts, individual facts, too, the facts of consciousness, individual facts like sensations and feelings, emotions like hope and fear. There is no room for a third realm like the realm of subsistence, a realm which is neither physical nor pyschical. What is not physical is psychical, what is not psychical is physical, and therefore every belief in an ideal sphere has to be regarded as superstitious. From the standpoint of this naturalistic attitude, only a nominalistic solution of the problems of essence and subsistence is consistent; only real things can exist and only individual ones. The arguments of this attitude are simple and well known; they need not be repeated.

But there is another attitude towards the world, the phenomenological attitude which leads to other consequences. It does not *ab initio* presume anything to be real, it makes no special presuppositions about reality. It argues that before we can begin with any theoretical considerations, we must ask what is given, and how it is given. It takes this question quite in the naïve form, for which the contrast between an ego and the surrounding world, the objects given to the ego, is fundamental. This attitude believes that only by beginning with the question, what is given and how it is given, can we find out how reality is shaped. Of course, this definition of the phenomenological attitude as starting from the contrast of ego and given object, and as questioning what is given and how it is given, is not the entire truth about the phenomenological attitude, but it is sufficient for discussing the answers which are the outcome of this attitude.

As a whole the phenomenological attitude leads to acknowledging essences and subsistent beings as facts. That may seem astonishing. Did not Berkeley and Hume also put the question: What is given? in the foreground of their interest, and despite this, come to a nominalistic conclusion? That is indeed true — but their nominalistic opinion was not the outcome of their phenomenological attitude. On the contrary, it often has been remarked that their phenomenological attitude was disturbed by sensualistic, genetic interests, etc., by the wish to dissolve all facts into elements. And their nominalistic answer was just the outcome of these other tendencies, not of the unprejudiced question: What is given?

Those who were really confined to a phenomenological attitude, and to it only, have always come to the same result, that essences have to be acknowledged as entities, and that a subsistent sphere of unreal facts, of mathematical-logical entities, etc., is given. Much as they might be opposed on all other philosophical questions, as long as they carried the phenomenological attitude out in a consistent way, philosophers like Plato, Thomas Aquinas, Leibniz, Husserl, and the new realists came to the same result, viz., acknowledging subsistence and essence as facts, as an outcome of the analysis of given facts, of the analysis of truth and error, of the analysis of the fact of meaning. All their arguments go in the same direction. For acknowledging subsistence I think G. E. Moore has given the nerve of the argument: In all our meanings, in all our thinking, we refer to an *object* of the thinking. If we speak of a unicorn or a square circle, if we use a false proposition, e.g., Napoleon I was the brother of Napoleon III, or a true one, Napoleon I was the uncle of Napoleon III, we always refer in our thinking to the objects and to the propositions as something different from our thinking and independent of our act of thinking. If we look at mathematical propositions in the way we have to look at them in mathematics, then we find them to be unreal, but nevertheless a realm of fact which we do not create, but discover.

In a similar way essences have to be considered, in the analysis of thought, as given facts. We cannot look at a tall man and give the result of the act of looking at him in the proposition, the man is tall, without conceiving the seen object *as* a man. Every act of seeing a man is seeing in him the essence of man, — that is the nerve of all the considerations which state essences to be facts. And the genetic consideration of concepts comes to the same result. It is not true that we form the concept of a toad by looking at many individual toads and by gathering out of the many toads the concept of toad. But when we see the first toad we see in it the essence of a toad. And most of us throughout life come no further than to look at a toad, not as an individual, but as a toad, as an animal which is an example of "toad."

It is not necessary to follow these arguments further; they are as well known an outcome of the phenomenological attitude as the nominalistic arguments are the outcome of a naturalistic attitude. And I think these arguments *for* subsistence and essence are as consistent from the standpoint of the phenomenological attitude as the nominalistic arguments are from the naturalistic standpoint.

If that is so, the solution of the problem of essence and subsistence cannot be given by discussing the arguments, but by discussing the attitudes out of which the arguments arise. The game of discussing the arguments alone without discussing the attitudes is lost before it is begun. Instead of undertaking this hopeless task, we have to seek a standpoint which decides the value of the attitudes, either by accepting one of them, or by reconciling them in a higher unity.

I think that as far as the two sets of arguments we have spoken of are concerned, a higher solution is possible. The *conceptualism* of the Middle Ages has shown the way out. In a certain way the decision of conceptualism is directed against the phenomenological attitude. The phenomenological attitude, as we have seen, wants only to state what is given; it does not ask in the first instance what is real. It decides, for instance, that the mathematical, the logical sphere is independent of the human mind, because it is *given* as independent. But it may be that a fact is *given* as being independent of us without being really independent, as, for instance, yellow, when seen, is immediately given as independent without being really independent.

The solution of conceptualism says, therefore, that propositions or mathematical facts are *given* to us in an ideal, a subsistent sphere, but it may maintain, on the other hand, that this independence is only an illusion, that this whole sphere of subsistence is only a creation of our mind, a projection which the mind puts forth; that the independence of the ideal sphere is set by the mind. In the same way conceptualism can maintain that there are essences as given facts, but that in reality they are only the outcome of our mind which has the faculty of idealization, of seeing, for instance, in every toad the essence "toad," by idealizing the toad-moment in the individual. If that is so, this creative conceptualism is the solution for the difficulties we have spoken of. According to it, logical thinking always has to do with subsistent propositions and essences, but this *ideal* subsistence is created in the *real* act of setting subsistence; and *essence*, this universal fact, is created in an individual act of setting essences.

So far the conceptualistic solution is a higher standpoint in comparison with the solutions of the naturalistic and the phenomenological attitudes. It maintains that logical analysis is right in speaking of essence and subsistence because these are experienced in the phenomenological attitude, and it maintains that natural science does right to believe only in the existence of individuals because this is the outcome of a naturalistic attitude. But conceptualism is not the last word in this question, cannot be the last word. It overcomes only the arguments *of the two attitudes;* but now another type of argument approaches, claiming its rights, a set of arguments which comes from another side. It is given by analysis of the results of natural science. It has to do neither with the naturalistic attitude nor with the phenomenological one. It is indifferent to both attitudes because it analyzes results which are common to both attitudes. And for this third set of arguments the conceptualistic solution is insufficient.

What is the ultimate criterion of reality in natural science? this set of arguments asks. What is the ultimate moment which natural science acknowledges as real? If natural science understands itself aright, it must answer, For me, laws are an ultimate reality, and lawfulness the ultimate criterion of reality. Natural science is never satisfied with the mere facts as such, when it does not find the law connecting the facts which justifies them as real. To find laws is its ultimate goal. Given facts, facts given as real, are denied to be real if they contradict the reality of laws. Why are the given secondary qualities replaced in our science by the reality of primary ones? Because the connection of primary qualities allows us to construct laws. Why did Einstein proceed from his special theory of relativity to the general one, why did he relativize time and space, and turn them into shadows, as Minkowski said? Because he tried to find the reality of an absolute law, of the world-law, as he called it, the generalization of the law of inertia. To maintain fundamental laws natural science declares all intuitively-given qualities to be subjective: color and sound and taste with Galileo, and afterwards the intuitive qualities of space and time with Einstein. To the Moloch law all given qualities have been sacrificed.

But what does it mean to say that law is real? Extreme nominalism tries to save its position by saying that laws are only the comprehension, the description of facts. The same succession of facts happens again and again, and we comprehend them in a general proposition.

It is easy to show — it has often been shown — that a mere comprehension of repeated facts is entirely different from law. That I have seen six motor cars in every street of a city is a comprehension of facts, but we do not acknowledge it as a law. We have the conviction that there is no internal connection between the number of cars and the streets of a city. Only where a flow of necessity goes through the facts do we believe in a law.

Extreme pragmatism and extreme conventionalism, on the other hand, take law only as a pragmatic means, as a convenient instrument for governing facts. But again, that such an instrument can be created is only possible because the facts allow it, because *in* the facts themselves there is a moment of repetition, and, therefore, universality is in the facts themselves.

But if law is something real there must be essences in things. That a thing is a mass and is, therefore, attracted by another mass, must be something real in the thing — its being as mass must be real, independent of the kind of mass it is, whether an iron mass or a wooden mass, or a golden one. That a body has a certain direction of movement is a moment which has effects of its own, apart from the other qualities of the body, — that it has a certain speed again has effects of its own. I do not want to repeat all the arguments for the existence of essences which can be derived from the existence of laws; I only want to show the direction in which this type of argument moves. These arguments are not of the same type as the other arguments with which they are very often confounded. The naturalistic arguments connect individual things with reality; the real things of nature are individual. Analysis from the standpoint of a phenomenological attitude comes to universals, to essences, but here these essences are only the result of an analysis of the given, which does not pretend to say anything about the reality of the essences. The conceptualistic solution was only possible because it could attribute universals and subsistence to the given world, and individuals to the real one. But in the reality of the laws of nature essences occur to us which have to be real. Now, it is no longer possible to shift all essence and all subsistence into conceptions of our mind. Essences have now to be acknowledged as real; the arguments taken from the reality of laws of nature not only maintain that essences are given, but also that they are real.

The old antinomy of Aristotle between the first and the second substances arises again. It is an error to see its foundation in the opposition of arguments coming from nominalistic considerations, on the one hand, and analysis of logical facts, on the other. Its strength lies in the opposition between the existence of general laws and the acceptance of individual things as the only existing things in nature. Everything in nature has to be thought of as individual, and, on the other hand, the reality of nature moves by laws; this antinomy can neither be solved by mere analysis of facts, nor by a conceptualistic interpretation, but only by metaphysics. That means that the solution can only be given in a sphere beyond logic and epistemology, in a sphere of which we have not the right to speak in this connection. By a merely analytic consideration the contradiction between the nominalistic and realistic contentions cannot be solved. Nature has at one and the same time to be conceived as individual in its things, and lawful, i.e., directed by essences, in its structure.

SUBSISTENCE AND EXISTENCE IN NEO-REALISM

A. W. Moore
(*Chicago*)

WE are all familiar with the appealing recital which Socrates, in his last hours, gives of his own youthful search through preceding philosophy and science for help in the midst of the moral, political, and religious confusion in which he and all other thinking Greeks found themselves. We recall also the pathetic failure of the search,—how nothing could be found that would explain why, for example, he should be sitting there awaiting the poison with the prison doors open and why his legs should not be well on their way to Megara with him, as, "by the dog," they would have been if they had got their way.

The import of this failure of Socrates's search is that pre-Socratic, even as pre-Einsteinian, science was unable to deal with what we call by the much used and abused term — "Values." The explanation of this disability was then, and in many quarters still is, that science deals with existence, with the world of "becomings," while values are "eternal." Such an explanation overlooks the possibility that values may have been forced into a non-existential realm because science, ancient and modern, has been operating with an inadequate conception of existence based upon what Professor Whitehead has happily called "the fallacy of simple location."

If the helplessness of pre-Socratic science in the presence of values appeared to call for the conception of a supra-existential world, this conception was further strengthened by the mistaken support of the ancient and still powerful religious interest in the possible survival of the self beyond its apparent termination with the body. We all know how soon the new capacity for abstraction in which Greek science began was turned upon this problem — how the abstracted patterns and relations of existence were transmuted into a subsistent abode for a subsistent self. We know too how this failed. We recall Mr. Bradley's famous footnote to the effect that "for many souls heaven will be a failure if the family dog is not there." On the other hand, Mr. Bradley was no less facetious about a heaven of "bloodless categories." Historically what always happens is, — the "bloodless categories" are used in the formal proof of a subsistent world which as soon as formally established is promptly refilled with the existential, terrestrial qualities discarded for purposes of the proof.

Another circumstance that made this early hypostasis technically easy was the fact that an important part of the existential mechanism of abstraction was overlooked. This is not strange as we are only beginning to discern the importance of it. Aforetime when we have talked of abstraction the best we could do was to refer to a "faculty" or "power" of attention. But thanks to the work that has been done on "the significant symbol," notably by Mead, we know that language is not a tag attached to the results of abstraction but that it is a necessary part not only of the act of abstraction, but of the experience of an object and the existence of a self. Dewey goes so far as to say: "That any event that can be psychic, that is, anything more than a diffused consciousness of pain or comfort, has language as one of its necessary conditions." This suggests that in the midst of neo-realisms, neo-rationalisms, and neo-idealisms, it is about time for the appearance of "neo-nominalism."

The conditions, then, under which the early doctrine of subsistence developed were: (1) a science based on the fallacy of simple location; (2) the consequent divorce of science from values; (3) the interest in the continuance of the self; (4) the ignorance of the fundamental importance of "the significant symbol" as the existential instrument and locus of meanings. All these conditions have played their part in the formation of the modern theory of subsistence, with the additional influence of the use by modern mathematicians of the blessed term "entity."

The official point of departure for the present doctrine is a challenge of the subjectivism which is alleged to infect other theories of knowledge, particularly the *objects* of knowledge. The boldness and simplicity of the *coup* by which this subjectivism is eliminated, commands our admiration. The elimination is effected by the simple device of a "true *summum-genus*" defined as "the possible objects of thought" or "the objects of possible thought."

Once upon a time in writing on some logical aspects of subsistence, I began a paragraph with the words, "we shall steer around the dialectical thicket that here confronts us." But I now propose to plunge into the thicket at the risk of never getting out and it is no trivial risk. In the discussion I have followed largely Professor Montague's exposition, in his interesting and important book on *Ways of Knowing*, as the clearest and most comprehensive statement.

At the outset we encounter some old difficulties. First, it is obvious that the *summum-genus* is a class of all classes, and this Mr. Bertrand Russell with all his dialectical virtuosity had finally to give up, because such a class could not include itself. The same point, of course, is involved in the question, Can "the objects of thought" include the thought of which they are objects? We are properly told that if we think of anything as excluded it is thereby included. And it is obvious that any thought may be thus included by a succeeding thought. But is the succeeding thought itself ever included? If we try to capture it by spreading our net still wider and announcing, in terms of the lawyers, that all possible succeeding thoughts are hereby and herein expressly referred to as objects, — still the thought that spreads this net is not itself caught in the net. And Professor Montague, himself, clearly concedes this, I think, when he says, "That a brain state can never be conscious of (that is, have as its object) itself, but only the state preceding."

But we have not reached the thickest of the thicket until we get into the internal structure of the *summum-genus* itself. We first note that while all illusions and contradictions are "objective," it is a highly dilute non-existent, unreal, objectivity they enjoy. Now the fact that this kind of objectivity is just what previous theories had called "subjective" puts us on guard for the possible reappearance of the old difficulties in new guise inside the *summum-genus*. And we do not go far, before signs that all is not well in the all-inclusive household of subsistence begin to appear. We read that "The *summum-genus* includes existence as relations include their terms or the sea its waves." In the first simile surely we cannot argue from the way relations in general include their terms to the inclusion or exclusion of one term by another. If we suppose that "democrats exclude republicans," we may say, though I doubt the wisdom of it, that the relation of exclusion "includes" its terms, but it includes them as excluding each other. It only includes them as terms in discourse. But when it is said that subsistence includes existence more is meant than that it is included as terms in discourse. The inclusion of existence by subsistence is not a merely logical but an ontological inclusion. This is indeed the cornerstone of neo-realisms. Its ontological character is further evident from the fact that the inclusion of the waves by the sea is offered as an equivalent simile and also from a later appeal to a cosmic will to effect the inclusion — an appeal which would not be necessary if inclusion meant only inclusion in discourse.

Passing to the second simile, — the inclusion by the sea of its waves, — given a good breeze or a lively earthquake the emergence of existential waves from an existential sea puts no great strain, I take it, on our imagination or powers of inference. But in the emergence of an existential sea and its waves from a subsistential sea and its waves there appears nothing — as yet — to take the place of the wind and the earthquake. However, such a hiatus, which strongly resembles the old subject-object disjunction, cannot be left open indefinitely. It must be closed somehow. And ironically enough it is closed as both rationalists and empiricists, Descartes and Leibniz, Locke and Berkeley, closed it — by an appeal, in Professor Whitehead's frank terms, to God; in Professor Montague's phrase, to a "Cosmic will." Hence when we are watching the waves we should not say: "where there is a wind there is a wave," but "where there is a will there is a wave." To be sure, in days of old God was wont to appear in whirlwinds and earthquakes. But if in the teeth of a spanking gale we are to say that the waves are due to the emergence of subsistential waves, "waiting from all eternity" to be miraculously transmuted into existence, why not return to good old Neptune?

Another phase of the difficulties in the relation of subsistence to existence appears in the treatment of possibility. On the one hand the locus of possibility seems to be in the realm of eternal subsistence. We read that "a couple could not be two unless there were a subsistent two waiting from all eternity for it to be." By the same token we must say that nothing could be hot or disgusting unless there were a subsistent hotness or disgustingness waiting from all eternity for it to be. But, on the other hand, we are told that an egg is a possible chicken because it is an actual space-time egg. This has a comforting sound, but it leaves us in a dilemma. If the actual egg is the possibility of a chicken, where does the eternal egg come in? On the other hand, if the possibility resides in the eternal egg "waiting from all eternity," where does the actual egg come in?

In the discussion of possibility I wonder how much we have been bewrayed and betrayed by the phrase, "a possible object." On its face, and after the traditional grammar, the term "object" looks substantival and the term "possible," adjectival, but the real meaning is just the reverse. The phrase, "a possible object," means the possibility of an object in which, of course, possibility is the substantive and "of-an-object" the adjective. "A possible chicken" means "the possibility of a chicken." And this is not a possible possibility. It is an actual, existent character of the egg as truly as its shape, color, or weight. The egg is not a collection of essences "occupying" space-time, on the principle of "simple location." The egg is an event with a drift or direction, denoted by the term "chicken." This *drift*, this direction, is the possibility.

A parallel confusion is to be found in the use of the terms "things" and "objects" as equivalents. We may cordially agree with the realist in his contention that "things" are not dependent on thought for existence and at the same time cheerfully subscribe to the doctrine of the idealist that "objects" are dependent on thought for their existence. "Things" not dependent on thought for existence are converted into "objects" by thought. But, failing to make the distinction, the independence of "things" is extended by the realist to "objects" and the dependence of "objects" is extended by the idealist to "things."

There is another matter that troubles me even as it did the Fathers. The essences, redness and hotness, are neither red nor hot. And all that is required to make them existent is that they be given position in the space-time order. But how does bare position in space-time order make an unhot hotness actually hot? However the question is beside the mark. For a cosmic will that can give it position can surely make it hot. Having already appealed to miracle, one more or less should not matter.

The main feature of the treatment of truth and error in the theory of subsistence is that the characters "true" and "false" are transferred from the acts to the objects of knowledge. Such a disjunction between the act and the object of knowledge and between the organism and its world is ominous. Error consists in perceiving a false, that is, an unreal, object. There is no bad or erroneous *act* of knowing. In general appearance, this resembles, as I have said elsewhere, the "aviary" theory of truth and error tried and found wanting in the *Theaetetus*. Other comparisons suggest themselves. On this theory a poor marksman should say in his defense, "There is nothing wrong with my shooting, the bullets simply persist in hitting the wrong 'objects.'" And a lazy school boy should say, "My spelling is perfect, it's the words that are wrong and that is no fault of the spelling."

Another difficulty appears in the relation of these "false," "unreal" objects to existence. On the general theory they should have been patiently and watchfully waiting from all eternity to trip us up. But in the more detailed account we are told that they are *produced* by distortions of ether waves, brain processes, etc. — all perfectly good orthodox existences. There are two questions here: (1) how do these existent, real, space-time processes produce unreal, non-existent objects? Again we need our cosmic magician but this time for a task just the reverse of the former one. There he had to produce existent objects from non-existent subsistence. Here he is to conjure non-existent and unreal objects out of very existent and very real refractions of ether waves and variations of brain processes. The second question is: if error be entirely a property of the unreal objects, what do we mean by "distorted" processes? "Distortion" certainly is reminiscent of error. But perhaps this is another case of fallacious metonymy.

However, I find myself in hearty agreement with that part of the exposition which teaches that the characters "true" and "false" do not belong to processes of perception. In Professor Montague's account these processes consist of ether waves, organic variations, etc., for which the characters "true" or "false" have no meaning. But on what basis are we to separate the existential processes of perception which are neither true nor false from the subsistential products which are either true or false? No knife falls or bell rings in the existent series of vibration and organic changes to mark the separation of the products from the processes. The poor stick bent with refraction and age, the two fingers, the converging tracks, etc., are obviously continuous with, and as existent as, the processes which produce them.

There is neither time nor need to review details of alleged incompatibility of the bent stick, etc., with scientific and public space, and the consequent necessity of finding a habitation for them in a non-spatial-temporal realm. I think Professor Whitehead has given the *coup de grâce* to this doctrine by showing, in his explanation of mirror space, that it rests again on the fallacy of "simple location." The perceptions of the stick in the water or through a refracting lens are "perspectives" on a level with the perspectives we get through the air or through touch. There is an indefinite number of these "perspectives" — these "modes of location." To select the particular "perspective," — the particular "mode of location,"— that happens to occur most often, because things are most often seen and handled in the air, as the "real" perspective, is to identify space and reality with our particular visual-motor habits — a rather subjective procedure for a hardy realism. These various "perspectives" are all equally "real." But when one of these perspectives takes on the function of signifying another, then "true" and "false" as characters of that function emerge. "True" and "false" are characters of the *act* of inference not of the "perspectives" as such. Once more I agree with Professor Montague that the treatment of truth and error has suffered from misplaced metonymy. But the misplacement I find in the reverse of the one Professor Montague deplores.

In this discussion on the terms "miracle" and "magician" have been used somewhat invidiously. From this some may gather that in the view of the paper nothing in the world is strange or marvelous. On the contrary, it holds that in the end everything is marvelous in the sense that it has a uniqueness, not of mere position in space-time, but of quality to which our "significant symbols" may point but cannot imitate. But this, I take it, does not call for a return to magic. In the presence of things which overflow our equations we may still behold, wonder, and often rejoice.

SECTION 3

Time: Thursday, September 16, 9.30 A.M.
Place: Standish Hall Common Room
Subject: The Bearing of the Distinction of Judgments of Value and Judgments of Existence upon Logic and Epistemology
Chairmen: H. B. ALEXANDER, Nebraska
WALTER G. EVERETT, Brown

VALUE, LOGIC, AND REALITY

WILBUR M. URBAN
(*Dartmouth*)

I

THE term value judgment is, in a sense, one of those things which, if it did not exist, would have to be created. By no other term could a distinction absolutely fundamental to the modern philosophic consciousness be expressed. And, indeed, in a sense, in a loose and general sense, judgments of value would be denied by no one. All propositions which we enunciate, either affirmatively or negatively, are judgments in this sense. If I say the mountain is high and beautiful, or crime is frequent and disgraceful, the two types of predicates lie side by side peacefully in logic as they do in practical discourse. Similarly there can be no question that propositions containing value predicates are the material of logical discourse. The propositions, the mountain is beautiful and crime is disgraceful, are as logical in form as the propositions, the mountain is high and crime is frequent. Thinking in terms of the former propositions is as much determined by the laws of logical connection as thinking in terms of the latter.

One thing we may confidently affirm from the start. However different affirmations of value and affirmations of fact may be, that difference cannot be pressed to the extent of denying to affirmations of value the character of judgments and of excluding the judgment of value from logic. Whatever the difference between fact and value may mean, it cannot mean that we have in the judgment of value the assertion of something that is not *the case*, is not a "fact" in the broadest sense. Values, however defined, are in the world. Either they are among those things that are the case, or they cannot be expressed at all.

In judgments of value, value is predicated by means of the same verbal and logical form as a quality is predicated. But there is undoubtedly a difference in meaning not brought out by the verbal expression. Thus, when we predicate value of anything, we pass from the mere concept of the essence of a thing, with its qualities, to a certain bearing which this essence has on its existence. It is *worth existing* or ought to be. Now it is undoubtedly this ought to be, this unique meaning, bearing on existence, that constituted the *differentia* of verdicts or value judgments. It is this *differentia* also that makes value and the value predicate the most difficult object of science.

This meaning of value predicates — this bearing on existence — is rather widely recognized and various terms have been invented to characterize its unique character. It has been called the *valid*, as distinguished from the existent and subsistent, a *Dignitative* (Meinong), or, in my own terms, a unique "*objective.*" These differences, due largely to differences of approach and of philosophic context, are of minor importance. The significant thing is the recognition of this unique character.

II

There is, then, a *second* thing that we may confidently affirm. Part of the meaning of the value predicate is this unique relation to reality, this bearing on existence described as ought to be, or worthiness to be. To eliminate it is to denature value.

But it is just here that we begin to see why value is such a difficult object of science, — why many have denied the possibility of the value judgment and that values are the material of logic. On the assumption that logic is the ultimate science of whatever is, *whatever is* being defined in the narrow sense of the existent, the value predicate, by its very nature cannot be the material of logic.

The most impressive way in which this thesis has been stated is the assertion that the value judgment is a *logical monstrosity*. Take, it is said, the value judgment in its usual form, "A is as it should be," or, negatively, "A is as it should not be." Apparently it is a judgment, because it seems to assure us by implication of the existence of a specific A. That an existential judgment is presupposed in so-called value judgments is beyond doubt, but one must not confuse the conditions with the conditioned. Such confusion can only result in a logical monster. It is best seen in the negative form.

For, if A exists, it is already as it should be, for it cannot be otherwise. But the positive form is no better. A is as it should be. If this form escapes contradiction, it falls into tautology, for if A is, it is already as it should be.

From this argument is drawn the conclusion that the so-called value judgment is not a judgment in any proper sense of the term, but merely an expression of feeling. In my examination of this argument elsewhere, I have readily admitted that the argument is perfectly valid if value be conceived as a quality, and it is in large part for this reason that I find myself forced to deny that value is a quality. Contradiction certainly does result if oughtness is the predicate in such a judgment of quality. Qualities inhere in objects, and since it is the quality that makes the object what it is, the judgment presupposes that the object is not other than it is. Make value equivalent to "ought to be" and call this oughtness a quality of being and the logical monster is complete.

It has been argued that this contradiction holds only if value be conceived as a "natural quality" and that, if it is not so conceived, the difficulties do not arise. I am unable to accept this distinction. For one thing I do not understand it. In any case, on the assumption that value is a quale, those who deny the value judgment are wholly justified. I can only state summarily my own conclusion. What we call a value judgment is either a *misnomer* — for a mere "expression of feeling" — or, if it is a genuine judgment, it involves knowledge and acknowledgment of a *unique form of objectivity*, differing from either existence or subsistence. If it is not, the value judgment is a logical monstrosity.

III

The immediate object of the preceding paragraph was to show the baselessness of the argument against the value judgment and the denial that value propositions are the material of logic. The only valid argument rests upon a false conception as to what the value predicate is. But the consequences are much more far-reaching. For the entire question of the nature and function of logic is really involved. Is it not perfectly clear that the denial that there can be a value judgment in any proper sense of the term, assumes that genuine judgments can be only judgments of existence and that logic deals only with existents? Both of these assumptions are questionable.

Logic has been defined as the ultimate science of whatever is.

But such a proposition is highly ambiguous. In one sense the expression, "whatever is," may be interpreted as "whatever is the case," in which case the proposition merely means that nothing that is capable of being expressed is without logical form — is outside logic. Or it may mean something much more limited, that logic is limited only to "real" objects. On this latter view logic can no more admit a centaur than biology can. Nor can it, which is more to our present purpose, admit the non-existential predicates, called values. Both are logical monsters. But need it be pointed out that such a limitation of the field of logic is, in Bosanquet's terms, simply *ex parte*, and rests throughout upon the assumption that the world of the actual is the one and only reality? Such a "prejudice in favor of the actual" is not a presupposition of logic in general.

Logic, I should maintain, is not, as in so many modern conceptions, the ultimate science of existence. It remains what it has always been, the science of correct thinking and of intelligible expression. Its material is *not* the existent, — that is the material of the special sciences, — but rather the meanings of the existent. Logic is the ultimate science of whatever is the case, but only in the sense that whatever is the case must be capable of being expressed; must, in order to enter into intelligible discourse, be capable of statement in logical form. As such, logic is *die Moral des Denkens*, the science of those absolute norms or values that must be acknowledged if judgments of truth and existence are themselves to have any intelligible and communicable meaning. As such, moreover, it is above all ontologies and all ontological prejudices.

There are, then, certain things we may say with a reasonable degree of confidence. An unprejudiced logic cannot be ontological,— whether realistic or idealistic. It is beyond such distinctions. Such an ontological logic always assumes that logic has the power to determine the meaning of terms and the sense of propositions. I do not believe that logic has this power. On the contrary, logic merely gives us the scaffolding of an intelligible world. Logical propositions, of themselves, treat of nothing. They presuppose that terms have meaning and that elementary propositions have sense. But they have no power to determine that meaning and that sense. Their meaning and sense is their connection with the world — with reality — and this connection can itself never be the material of logic. It is presupposed by logic.

But there is also a second thing we may say with equal confidence. This "meaning" of terms and propositions, presupposed by logic, must be the material of another science, or other sciences. Of what then is it the material? The meaning of terms, their connection with reality, is the problem of epistemology, and in so far as the exigencies of modern thought require such a distinction, of axiology. The axiological developments in logic itself are the necessary consequence of the recognition of this fact.

IV

Axiology is, again, one of those terms that had to be created. From one point of view, it is simply a class term for value problems. From another point of view, it registers a standpoint in modern thought quite distinct from anything that preceded it.

The gist of the axiological point of view, in this latter sense, may be stated in two propositions, both of which have far-reaching philosophical consequences. The first of these is that valuation is cognitional, involves an element, or kind, of knowledge. The second is that cognition itself is valuational. It asserts the value character of the theoretical and that we miss entirely the true inwardness of the problem of cognition unless we recognize that it is part of the problem of values at large.

The first thesis, — that valuation is noetic, — is, in general, although not always, denied by those who deny the value judgment, the denial taking the following form: Valuation, while involving cognition, is itself not cognitional. Otherwise expressed, valuation is not independent of knowledge, but it is other than knowledge.

This position is argued in several ways. If the value predicate is conceived of as merely a psychological character which the object acquires only by relation to the liking or disliking of a sentient subject, then it is argued that this relation creates the predicate and cannot, at the same time, cognize it. There is, then, no knowledge *of* value, but only *about* value, no judgment of value, but only judgments of fact. If, on the other hand, value is thought of as a nonmental essence or quale, it may be argued that valuation is always an operation supplementary to knowing, but has no part in the knowing process. Values are enjoyed, not known, and the very condition of their being enjoyed is that they shall not be related to existence or reality by judgment.

This is no place to consider these arguments in detail. It can, indeed, be shown, as I have shown elsewhere, that neither position is capable of ultimately intelligible statement. For if, as on the first view, the psychical character, the element of feeling, excludes the noetic character of valuation, then values can never be really known, — and not being known, cannot be expressed. We are really confusing value with the relation of value to a sentient subject. All we have knowledge about is this relation. On the other hand, if values are merely enjoyed, not known as objects or objectives with a relation to reality, then we have the supreme inanity of interest in the unreal. William James was entirely right in calling such a philosophy fantastic. "As if the world of values were independent of existence! It is only *as being*, that one thing is better than another. The idea of darkness, as merely subsistent quality, is as good as the idea of light. There is more of value in lights being." In short, part of the nature of value is its unique bearing on existence, and this is an object of knowledge.

I can, however, merely suggest such lines of reflection. Here I must confine myself to the larger issues and be content to call attention to the general assumptions that underlie these positions and the important consequences that follow from them.

The consequences of the denial of the noetic character of valuation are far-reaching. The only possible inference to be drawn from the premises we have been considering is that value is that which cannot be expressed. "In the world everything is as it is and happens as it does happen. In it there is no value. All meaning of the world must lie outside the world." This consequence has actually been drawn — notably by Wittgenstein. And this, despite the fact that values are constantly being expressed; despite the fact that knowledge and acknowledgment of values is presupposed in all expression of meaning, all intelligible discourse. But we need neither grant these assumptions, nor accept these consequences. For no such clear line between the valuational and the noetic can, it is generally conceded, be intelligibly drawn. The denial of such an absolute line of demarcation is one of the main contentions of both the pragmatic and axiological developments of value theory.

V

It is at this point that we begin to understand the second thesis of axiology, namely, that cognition is itself valuational. For the ultimate purposes of this discussion, this is by far the more important conclusion of modern value theory, for it is here that we come upon the "Great Divide" in modern thinking.

In developing this thesis I can but call attention briefly to two sets of "facts," the recognition of both of which has become an integral part of most of present day thinking on this subject. The first of these concerns the predicates of so-called "value" and "factual" judgments; the second, the subjects of these judgments. With regard to the predicates, it is recognized, by the most varied schools, that no clear line of demarcation is possible between the factual and the valuational.

The "world" about which we talk, the universe of pragmatic discourse, contains elements of squareness, goodness, blackness, consistency, utility, regularity, confusion, scandal, necessity, beauty, solidity, dullness, transitoriness, and permanence. These elements, or qualities, that go to make the world are *all there*, — all in the world in some sense, — all real in the sense that they are the case. We may, if we will, take certain of these elements or qualities (or whatever name we prefer to call them to start with), such as blackness, squareness, solidity, and group them together as facts. We may take others, such as goodness, utility, and beauty and call them values. But under what heading should consistency and necessity, regularity, disturbance, etc., be classed? Surely these are both facts and values. Nothing but a prejudice, an *ex parte* judgment, can make them exclusively one or the other.

It is the halfway position of these predicates, — their hybrid character, if you will, — that interests us. They are midway between those that we would unhesitatingly call noetic and those that we would unhesitatingly call valuational. The fact that they can be equally well placed under both rubrics shows the inseparable relation of fact and value. Not only may the pragmatist rightly insist that the "actual knowing process displays no barrier between fact and value." The axiologist is also justified in insisting that a new category, that of validity, is necessary to describe the status of these predicates. He is also justified, I think, in his use of the term Acknowledgment, *Anerkennen*, to express the unique form. But to develop this point would take us too far afield.

The "value-character of the theoretical" is even more clearly seen in an examination of the subjects of propositions as they appear in significant discourse. That an element of selection and valuation is in the very material of our practical discourse, and in the historical and humanistic sciences developed from it, is now a commonplace. One may indeed compare two styles of art or two forms of the state wholly impersonally, as impersonally as we compare two minerals or two types of vertebrates. But who is any longer naïve enough to think that we can form the concept of style itself without reference to aesthetic values, or concepts of the state without reference to moral and social values? These values are woven into the very texture of the material itself.

How far does this truth extend? Certainly it is a character that strikes deep into the structure of things. It is clear, for one thing, that it extends as far as life extends. We may compare the growth and development of two organisms or species in a wholly impersonal and value-free way. But, again, who is naïve enough to think that we can form the concepts of growth, survival, and even of organism itself, without thinking of organism as a center of values, and ultimately of life itself as a value concept? Value is again a moment in the material with which the science deals. I have attempted elsewhere to show, and I think it can be shown, that all objects that become the subjects of meaningful propositions already have value as part of their constitution. We must content ourselves here with the general statement that values are so deeply woven into the very texture of reality, that value and existence cannot be separated without leading ultimately to unintelligible discourse.

Not only may the pragmatist say that "facts are always disguised values." It is necessary for the axiologist to go further and say that "the recognition that the very givenness of objects and their existence involves valuation, is the first step toward an adequate theory of value." This also, I think we may say with a degree of assurance, is a conclusion to which value thinking has been forced. It is at least part of the pragmatic and axiological developments of logic and epistemology of which we have spoken.

VI

All this involves, it is easy to see, the more ultimate problem of metaphysics and value. It is at this point, above all, that Plato's saying that value is not only the last, but also the most difficult object of science, strikes us with all its force.

On ultimate metaphysical questions, there is a Great Divide in modern value theory and the nature of this divide is perfectly clear. It is between those who hold that value is a subjective *addendum* to reality and those who hold that it is part of the nature of anything, or, indeed, the essence of reality.

It is tempting to say that this is merely the divide between realism and idealism and that the fundamental oppositions in philosophy have simply restated themselves in value terms. In a certain sense this is so, and, from the point of view of the larger issues of metaphysics, this is the important point. But the issue is not quite so simple as this. It is precisely because of the complexity at this point that the value problem is the most difficult problem of metaphysics.

The differences of opinion among realists are, to be sure, themselves significant. There are those, as we have seen, who incline to the view that value is a psychological character which the object acquires only by a relation to the liking or disliking of a sentient subject. There are those who regard value as an indefinable quality that attaches to existences in the same way that natural qualities such as sense quales attach to objects. There are those, finally, who hold that values attach to essences rather than to existences, either physical or mental. Despite these differences, all agree, it is true, in being realistic in a certain popular sense, namely, in rejecting the fundamental thesis of the axiologists, that value is in any sense an ultimate character or condition of existence and of our knowledge of existents.

Like the realists, the idealists also disagree on important points. There are those who hold that values exist only in and for persons and deprecate what they call the talk about values *in abstracto*, rather than about valuing selves. Others hold that values are over-individual and impersonal and that there are absolute values acknowledged, but in no sense created or determined by valuing selves. Yet here again, despite these important differences, all are idealists in a significant sense. All see in value not a subjective *addendum*, but an ultimate character and condition of existence, part of the very nature of the perceptual, the aesthetic, and the historical object. *For all* the recognition that the very givenness of objects and their existence itself involves valuation, is the first step towards an adequate theory both of value and of reality.

This then is the *Great Divide*. Between the two views a great gulf seems to be fixed. And yet the gulf is, I am disposed to think, not wholly impassable. In the impressive "meeting of extremes in modern philosophy," idealists and realists may apparently at least signal across it. The recognition by many, in both camps, of the objective character of value and significance, however varied the terminology, suggests that up to a point, at least, they speak a common language. It is because of these hopeful signs that the character of this divide should be clearly understood.

That which is clear, to most of us at least, is that while value and reality cannot be identical, they are certainly no strangers to each other. Let us consider the first part of this proposition.

The ought and the is, — value and existence, — are and must be different. If value and existence, norm and reality, were identical, there would be an end to valuation. The alternative character of valuation, affirmation, and negation, presupposes this difference. If a merely natural necessity guided the mind only to sound conclusions, there would be no logical appreciation of true and false; if the natural process of motivation realized positive values in all volition and conduct, there would be no ethical appreciation of good and bad; if in every creation of nature and of art we had a perfect expression of significant content, there would be no aesthetic appreciation. The very fact of valuation necessarily implies a certain dualism of the valuable and the valueless in reality. It is for this reason, as we have seen, that on the assumption that logic deals only with existents, the value judgment becomes a logical monstrosity.

The meaning of the ought and the is can then not be identical; the relation of value to reality cannot be one of complete identity. Neither, on the other hand, can the two meanings be entirely different. This is equally unintelligible. Examination of both the subjects and predicates of value judgments shows this. The predicates contain in their very meaning that bearing of essence on existence without which they become unintelligible. The subjects of value judgments involve evaluation so completely in the very constitution of their nature and meaning that to separate value and reality here leads to non-sense, to the unmeaning. With equal truth it may then be said that value and reality are not identical, but that they are also inseparable.

VII

Are we then left with a refractory dualism of two ultimate surds? This is the view of some, for whom in the very nature of the case this final problem is necessarily insoluble. It is, in the words of Windelband, the "sacred mystery," marking the limits of our nature and of our knowledge. That there is an element of mystery here I would be the last to deny. We have here, indeed, as every competent thinker, from Plato to the present, has seen, the last and most difficult problem of human thought. And yet I cannot bring myself to believe that it is wholly insoluble.

I can but state my own general position in this matter, confident, however, that it is not only that to which one is inevitably driven by conscious lines of argument such as the preceding, but that it also represents those deeper convictions to which the less conscious thinking of the period has driven most of those who have been most constantly preoccupied with the value problem.

I hold that there can be no existence without value and no value without existence. Reality is neither mental nor material, but a realm in which thought and thing, fact and value, are inseparable, neither having any existence apart from its correlative. The acknowledgment of this relation is the condition of philosophic intelligibility. To separate value and reality leads to contradiction and unintelligibility. This much is coming to be realized, I think, by the most varied forms of philosophical thinking, by pragmatists and axiologists — by idealists, both subjective and objective; and by implication at least, even by some forms of realism. The problem of "meaning" is fast becoming, in all quarters, the key-problem of philosophy, and it is becoming increasingly difficult to separate meaning, and its communication, from the values and their acknowledgment which meaning presupposes.

Thus far thought can reach, but I am also disposed to hold that this is as far as it can at present reach. I am, moreover, inclined to think that this limit is generally realized, even if it is not explicitly admitted. It is this tacit admission, moreover, I am inclined to believe, that constitutes the underlying motive of the revival of interest in the mystical element so characteristic of the thought of the present time. The actual "fusion" of value and existence of which Plato speaks, despite the things that make it impossible to identify them for abstract thought, is constantly accomplished in concrete experience. But it can be accomplished only by "trenching on the mystical." I am rather inclined to believe that it is for these very reasons that, in the words of Simmel, "an element of mysticism is an inevitable characteristic of every first-rate modern mind."

FACT AND VALUE

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I SUPPOSE that what is really wrong with the philosophic sciences is that they do not sufficiently test their fundamental abstractions, and so build on unsound foundations taken over from ordinary life, and the sciences, which, though good enough for the purposes for which they are used, will not ultimately stand. The notion of "fact" seems to me an excellent case in point. We are very familiar with it, use it continually, and suppose ourselves to know all about it. A "fact" is, we think, something existent in its own right, and irrespective of us: we do not make it nor invent it but find it, and find that we have to recognize it and to submit to it. We can indeed like it or dislike it, and value it accordingly: but our valuations have nothing to do, either with bringing it about, or with determining its subsequent career. They are "subjective," it is "objective," and so they are, and remain, literally worlds apart.

Yet this commonly received account of the relations of fact and value seems to be so demonstrably and ludicrously wrong that it crumbles at the least touch and at once displays its falsity. For the facts before which we now choose to humble ourselves are avowedly *known* facts, recognized as such; but they have not been so always. They were once *unknown*, and when they were first suspected were disputable, and disputed, allegations. They have plainly had a history, and it is possible to put the question — *how* did they ever win their way to recognition? Once we ask this, their too solid flesh begins to melt and their pretensions evaporate. For when these "facts" first appeared above the horizon of thought they came in inverted commas and were anything but indisputable. They were mere candidates for recognition, "facts" by courtesy, wedged in a clamorous mob of rival claimants who also claimed to be facts as good as they, or better. And, far from groveling before them, men were critical of their claims, and greeted them with a question mark or a sneer.

For a "fact" then to shed its inverted commas, for an *alleged* fact then to become a *real* fact, is an achievement to be proud of. It means survival in a struggle for existence, the successful vindication of a claim to reality, the passing of a critical examination, the defeat of plausible competitors, the triumph over alternative allegations which have failed to make good their claims. Such appears to be the previous history of every established fact, when we inquire into it.

Now is it not as clear as daylight that, with such a past, no fact can possibly plead that it has had no truck with values? It has *not* made its way without human aid by the sheer force of its innate brutality, but owes its rise to the favor shown it, to the human support its claims have elicited. At every step in its career it has been weighed and valued by every variety of mind, and by the time its position is assured, and it has risen to the highest rank a claim to reality can attain, it is shot through and through with values. Human needs, human valuations, and human expedients have made it what it is, and to them it owes its title. It has earned it, not so much by the brute strength of its claim as by the *mariage de convenance* it has contracted with one or more of the scions of the House of Value. Nor can it be divorced from them without destroying its status, and bastardizing its progeny. If there is any fact which it is easy, and incumbent on us, to recognize, it is this.

Nor is it hard to see the reason for this fact. It is as good an example as is to be found anywhere of logical "necessity." To see it we have merely to examine the condition of any thinker deliberating about the making of a judgment. He has before him the various factors in the situation as it appears to him, and desires to sum them up in a judgment. Normally the situation will seem to warrant *several* interpretations and deductions, and he feels that it is up to him to choose the *best* of the alternative judgments which occur to him, i.e., the truest or most serviceable. If in the end he judges *S is P*, this means that he has *preferred* it, and judged it *better* than S' *is* P' or S^2 *is* P^2.

Shall we not say, then, that every judgment ever made presupposes a human act of choice, and a valuation which exalts it over all alternatives? At first this may seem too hasty an inference. For are there not cases where in point of fact no alternative to the judgment made occurs to the mind, where the situation seems univocal, and calls for one interpretation alone? *Psychologically*, no doubt, there are such cases, but they are no ground for modifying our logical doctrine. For even though, as a matter of psychical fact, the judger's mind was not, at the time, *aware* of any alternative, it does not follow that, *in and for logic*, none existed. We usually discover this after we have launched our judgment, and found that others do not agree with us, but judge the situation differently. And even if they don't, we can always *ex post facto* think of alternatives to our actual judgment, if we stop to reflect. It is obvious, for example, that questions can always be raised about the linguistic form of the judgment, even where its substance is not called in question. Even the firmest faith in the absolute necessity of arithmetical truth may be puzzled to decide whether it is right to say "2 + 2 is 4" or "are 4," and whether it would not be better still to say "make 4" or "are made 4." And even the most confident dogmatism may be shattered, or reduced to speechless fury, by bombarding it with questions, inquiring into "what precisely is meant" by the terms it uses, and wanting to know why it has ruled out certain alternatives.

No fact can possibly claim exemption from this process; none can possibly deprive science of the right to reconsider its status. It won its title by making good its claim to be the *best* account of its subject available, and, to retain it, must *remain* the best. Its tenure is no other than that of the priest of Diana Nemorensis.

Thus, if philosophers would only cultivate a really inquiring mind, they could easily convince themselves that every "fact" carries hidden values in its bosom, and should logically be regarded as a *crypto-value.*

It is equally easy to challenge the antithesis of Fact and Value from the other side, by inquiring into the truth of the denial that values are facts. Surely, we may urge, whenever we pass a value judgment on a fact, i.e. (as we have seen), recognize it as a genuine fact, the fact that we do so is not merely a value but itself a fact, as decidedly as anything in the world. If one philosopher prefers push-pin and another poetry, these preferences are surely good facts: it is no use objecting that they are only psychical facts about philosophic idiosyncrasies. For this does not destroy their factual nature; and besides they may be fruitful of other facts of the crudest and most indisputable sort, if the philosophers act upon their beliefs about what is good and better. Mankind has always acted on its beliefs and striven to realize its ideals and to turn its values into facts; and, to a large extent, it has succeeded.

The current antithesis, then, between Fact and Value seems to break down completely. It is true neither that "facts" differ in kind from "values," nor that values belong to a world incommensurable with that of fact. But I venture to doubt whether the breakdown of this antithesis should be regarded as a disaster and a failure of philosophy. It is only the failure of a false abstraction, and the defeat of a pernicious prejudice. The attempt to set up an absolute divorce between Fact and Value was part and parcel of that wildgoose chase of the absolute on which philosophers have wasted so much ingenuity. The simple truth is that the facts and values we have are *not* absolute; they are relative, relative to us and to each other. But why assume that they are any the worse for that? Is it not better thus? Do they not both chime in with our purposes, and play into each other's hands, most beautifully?

"Facts" are those reality-claims which for any purpose engrossing us we find it expedient to accept; "values" are the responses they elicit from our nature. But painful experience teaches us that reality-claims are by no means *ipso facto* facts; so we always desire to evaluate such claims, and make their critical evaluation essential to scientific method. We proceed cautiously; we take claims as facts, experimentally, and exhibit their value. Not absolutely, nor forever, but for the purpose in hand. And that may often require us to take as fact, for the purpose of the argument, what we do not believe will stay fact at all, or what we are resolved to render unreal with all our might, and to reduce to a fact merely of history. In the former case the fact is made by fiction, in the latter it is unmade by action; in yet others our acts make our hardest facts, and not infrequently we find that nodules of fiction have grown on the roots of our facts and augmented their fertility.

Thus the recognition of fact is one of the methods of treating a claim to reality and of determining its value. Such recognition can be momentary, temporary, provisional, strategical, hostile. There is nothing in it to impair our right to retract it, modify it, expand it, sacrifice it to a better fact "discovered" later, perhaps only as a consequence of our erroneously accepting it first.

Much the same is true of our valuations. Far from being out of touch with the realm of fact, they seem to be themselves psychical facts of the robustest kind, and potent factors in the transformation and development of facts. For they are *meant* to operate on the "facts." Being essentially psychical attitudes, they vary, change, and grow as life proceeds. Being all akin as species of the good-or-bad which designates relation to purpose, they are all interchangeable, and in theory at least might pass current at a stabilized rate of exchange. Actually, men tend to differ, and even to quarrel, about their valuations: some incline more to ethical, others to aesthetical, others again to logical, valuations. They differ accordingly about the weighting and the rate of exchange of their values. These clashes among our valuations and the values they establish account for many of the persistent differences of opinion among men. Moreover a study of the actual knowing process will rapidly eradicate the belief that an impenetrable barrier separates facts from values. We shall everywhere find "facts" growing into values, and "values" into facts. It is indeed a common human weakness to turn facts into values by esteeming them just because they are facts and derive their authority from brute force. For minds that crave for extraneous support are only too delighted to find established facts to cling to, and to be relieved of the responsibilities of choice and the risk of creating new values. Conversely the history of every science shows us values hardening into facts. First of all a craving, say for a predictable course of events, engenders a demand or postulate; this suggests a fiction or a hypothesis, say of the uniformity of nature; finally its testing and verification end by establishing the "facts." But they would never have come within our ken, never have become facts for us at all, if we had not allowed our hopes to outstrip our knowledge, and to inspire our acts! Such is the ancestry, not only of every superstition, but of all the great postulates which our sciences use to formulate the "laws" of nature and to ascertain its "facts."

In short, in actual use, Fact and Value, far from being antithetical and hostile, coöperate. Both may be described in Kant's clumsy jargon as "categories," and the inquirer may use either, as suits his situation.

All of this seems to me so simple and so obvious that it hardly seems worth while coming 3000 miles to say it. Nor would it be, if it were acceptable, as I greatly fear it will not be. For unfortunately there is not a doctrine of logic which is not questioned by competent authority; so I fully expect that what is all so obvious and simple to me will appear incredible to others. I shall be told that my vision is at fault, that my perceptions are but idiosyncrasies. And as the question concerns ultimate valuations and differences of taste, I have no cogent confutation: I can only beg my critics to bear in mind when they say this that, by parity of reasoning, *their own* convictions must be just psychological idiosyncrasies too!

VALUE AND EXISTENCE

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I

IN dealing with the problem of knowledge, Kant took it for granted that the problem was one of synthesis. But he saw that an empirical synthesis was not sufficient. He saw that the inquirer must not come with a perfectly open mind, if he is to learn of nature. Hence he introduced the notion of *a priori* synthesis.

This *a priori* he regarded as one contribution to the complex whole of knowledge, the other contribution being the empirical material presented for synthesis. He saw that knowledge claims universality and necessity, and that these claims could not be justified from the side of the empirical contribution. Hence he concluded that the universality and the necessity depended on the *a priori* contribution. And he set himself to interpret knowledge in accordance with this conclusion.

But in the end he did not succeed in justifying his view, and his attribution of universality and necessity to the *a priori* element fails to convince.

I believe that Kant was right in insisting that there is an *a priori* element in knowledge, wrong in associating with it the universality and necessity which knowledge claims.

II

We may set out the main propositions leading to Kant's views thus:

(i) Knowledge claims universality and necessity.

(ii) A sound theory of knowledge must acknowledge this claim and justify it.

(iii) Knowledge depends on data presented in sense (empirical element).

(iv) Knowledge is the result of a synthesis of disjointed materials.

(v) Knowledge involves an element which is not presented in sense, which what is presented in sense cannot confirm or refute, but which rather serves as a means for dealing with what is presented in sense (*a priori* element).

(vi) The empirical element consists of the disjointed materials, the *a priori* element consists of the principles of synthesis.

(vii) Because the empirical element cannot justify the claim of knowledge to universality and necessity, we must justify this claim on the basis of the *a priori* element.

(viii) Thus the forms of synthesis are universal and necessary. Hence *a priori* = universal and necessary.

Now of these propositions, I should admit (i) and deny that it is necessary that a sound theory of knowledge need make good the claim *here and now.* A sound theory of knowledge must admit that what knowledge is striving after is universality and necessity. And it must justify the striving. It need not admit that knowledge is in possession here and now of anything universal and necessary.

As to (iii) and (iv), granting that knowledge depends on data presented in sense, it is not necessary to suppose that what sense receives consists of disjointed materials which need synthesis *ab extra.* Knowledge grows by a process which involves differentiation of fragmentary experiences from the matrix of experience as well as articulation of these experiences into a fuller experience; and the principles controlling this articulation are perhaps connected with the conditions under which the differentiation takes place.

If this is the case, we might be able to accept (v), with a new meaning. "Knowledge involves an element not presented in sense," since it is that which conditions the articulation of the sense-presented elements. "Which what is presented in sense cannot confirm or refute, but which rather serves as a means for dealing with what is presented in sense" — this we should have to examine closely, in the light of the whole history of knowledge.

If we spoke of it as *a priori,* we should then do so only in the sense:

(a) that it is not logically dependent on the articulation of the sense-presented elements;

(b) that it in some way controls this articulation.

We should have to remember that there is nothing in this meaning of the *a priori* to lead us to regard the *a priori* as universal or necessary.

The clear-cut statements of (vi), (vii), and (viii) would then have to go, and our interests would center on endeavoring to make out (v), and to see how it actually operates, if it exists at all.

III

This paper is based on the view that knowledge does involve such principles. Their main characteristics are:

(i) that they function as *a priori,* in the sense that they cannot be derived by any logical process from propositions capable of being described as "based on experience," and that they are not capable of being refuted by appeal to "facts;"

(ii) they are not self-evident; they need justification through their relation to experience (as Kant rightly said);

(iii) they are not universal and necessary in experience, in the sense of being eternally unalterable in content; and they cannot be set out in a complete and final system.

If we consider only their second and third characteristics, we shall fail to see why they should be described as any more than scientific hypotheses; but thereby we shall fail to do justice to the complexity of the situation in which man's activity finds itself. For the fundamental point is the stubbornness with which man adheres to these principles in spite of apparent facts to the contrary.

We may take, for example, the attitude of the investigator who finds a bowl of water warm to one hand and cool to the other. A "wise passivity" would record the facts, and note that "warm" and "cool" can belong to the same thing at the same time, just as "large" and "small," or as "yellow" and "round." It would record the facts, and, so far as I can see, would leave them there. It would involve more than "passivity" to ask under what conditions water is "warm," and under what conditions it is "cool." What the investigator actually does is to insist that the full situation cannot have been disclosed, because as disclosed the facts are self-contradictory; he saves the situation by substituting "appears" for "is," and asks under what conditions the water "appears" warm to the one hand and cool to the other.

Now the principle, "self-contradictory predicates cannot belong to the same thing," may be interpreted in a purely formal way. But, so interpreted, it is incapable of telling us what actual predicates are self-contradictory. Or it may be part of a fuller statement explaining what predicates we are going to refuse to accept as belonging to one thing. It is, then, not a tautology, nor a generalization from facts (for facts cannot "confirm" or "refute" a refusal on our part to accept them as rational), but a rule with which we approach the facts, a touchstone by which we are to know whether our efforts to understand the facts are successful.

As a purely formal statement it is no doubt universal and necessary, inevitable and unchanging: but once we give a concrete account of what predicates we are going to take as self-contradictory when they are regarded as belonging to one thing (and we cannot avoid this), we have a principle which the history of thought shows to have functioned in an *a priori* manner, and to have been subject to modification in the course of time.

Or we may take as an example the closely related demand for permanence: the insistence that what is genuinely real cannot change. The significance of this for Western science and for philosophy has been amply brought out by M. Meyerson; we need only note here *first*, that it is *not* a generalization from experience (which on the contrary shows more change the more we investigate it), but rather a refusal to accept experience for what it pretends to be; *secondly*, that it is *not* a mere scientific hypothesis in so far as it does not admit of being confirmed or refuted in the ordinary way, and indeed is persisted in stubbornly in spite of overwhelming evidence to the contrary; *thirdly*, that it is just this persistence in it that has given rise to the mechanistic science of the last three hundred years; *fourthly*, that it still operates so strongly that modern thought is finding great difficulty in modifying it in the interest of the reality of change.

I have endeavored elsewhere to show that the modern scientific outlook is the result of a number of these principles, functioning as *a priori*, operating as "demands." They cannot be reduced to a system of principles which are rounded off and complete. They are subject to modification, and are in no way finally fixed. "Subject to modification," though never "refuted." Man refuses to accept as final, experiences which do not conform to his demands. He uses his demands as a clue to the nature of the universe, in spite of facts to the contrary. But it may happen that his outlook changes, so that he is ripe for a modification of his demand. His change of outlook may be partly helped by the fact that the old demand beats unavailingly at the gates of reality, while a modified demand moves more easily among the facts; but this by itself would not be enough to bring about a modification of a demand. As Mr. Russell has said about certain views in philosophy, man is not argued out of them, but has to grow out of them.

IV

It is not only in man's intellectual outlook that we find such principles functioning. The account of value is, it seems to me, best given in parallel terms, and the intellectual demands are best understood when set among the values in general.

(i) Value involves appreciation: something we set a price on, something we have set our heart on.

(ii) But it involves no mere unregulated desire. It involves approval. It is that which we consider ought to triumph over all the other things on which we may set our heart.

(iii) I should go further and (with, e.g., Bradley and Bosanquet) say that it is something which our head approves no less than our heart. It is that which we feel to be in harmony not only with our desire, but with the nature of things.

(iv) But I should be unwilling to say that it is something that we feel justified in asserting with confidence *to be* in harmony with the nature of things, to be with absolute certainty that which sheds light on the nature of reality, so that we *know* reality through it. I should prefer to say that, while being subject to modification, it functions in an *a priori* manner.

Our attitude, then, to what we value should not be a mere cautious "if we can find it to be justified, then we shall accept it, if not, we shall leave it aside," nor a bold confident, "if it is not justified then the universe is meaningless."

It should be, rather, "we feel justified in using this that we value as a clue to the nature of the universe, in spite of facts to the contrary. We shall force the universe, if we can, to show itself such as to bear us out. We shall not modify what we value merely because of the difficulty of maintaining it. So long as it is what we value, we shall hold to it in spite of appearances to the contrary. But we recognize that what men have valued, men have outgrown; though we find that they outgrow one set of values only when they find themselves under the influence of another set. And we believe that what man comes in the end to value, the universe will justify."

This is the attitude of the "Idealist" man of affairs in face of a situation which, men would say, demands "realism"; and when the "Idealist" finds himself thwarted at every turn, his plans defeated, he refuses to admit that his policy was wrong. He will refuse to admit that he *is* defeated. He regards the fire at which he is burnt as "a candle that will never be put out"; the cross on which he hangs, as the True Cross. And who shall say that he is wrong? We have many instances, surely, of men who refused to be discouraged by failure, but who in the end were accepted as pioneers of the truth. Their enemies were not only men, but facts: it was in the face not of men, but of facts, that they dared to take their own way.

Now, I do not wish to insist on any pure or unconditional "liberty," on any "will to believe" that can maintain whatever it likes in the face of overwhelming odds in the way of fact. What I do wish to insist is that the whole situation of man, in respect of his whole activity, involves the functioning of principles in an *a priori* way, principles which he endeavors to force Reality to accept. Man never knows when to give them up, and his only method of discovering "whether they are of God or whether they came from himself alone" is to persist in them so long as they are his values.

V

The situation in all the spheres of man's activity is on precisely the same footing, no sphere having any self-evident prerogatives above the rest: and the difficulty is that the demands made in the various spheres do not harmonize.

A demand, to be effective, must make itself felt in such a way as to modify the outlook of a large body of men for a considerable time. But not all the demands operative in a given civilization at a given epoch are made by the same body of men, or by the same man at the same time. The old quarrels between poets and philosophers, the conflicts between religion and science, between morality and art, between libertarians and necessitarians, between optimists and pessimists — all can be brought to a sharp issue by reducing them to the differences of demand out of which they spring: the question, "What are your demands?" measures, without spanning, the gulfs.

In Western civilization we can say that the total effective demands fall into four main groups: those connected with science, art, ethics, and religion.

In this situation of the conflict of demands, what attitude is man to adopt?

He must go forward with his life in his hands, so to speak, accepting the demands he finds himself constrained to make, insisting on them resolutely in face even of facts to the contrary: for only so can man across the ages come to a knowledge of himself and of the universe. But this is only one side. To his resolution he must add the toleration which comes of insight into the whole situation. The history of human thought and human activity is a record of the disciplining of human demands. Man must demand; but he does not know what demands he ought to make, and he can only come to know this by making them, and insisting on them, and being himself moulded in the process of his resistance to reality's resistance to his demands. Reality is the potter's wheel against which man must hold himself firmly if he is to be truly moulded; and it is only by his demands that he can hold himself against the wheel.

The word loyalty is appropriate here. Man must endeavor to be loyal to all the demands he is constrained to make: thus he ought to refuse to accept as ultimate a science which satisfies his intellectual demands but leaves his practical demands unsatisfied, or an ethics or a religion which satisfies his practical demands but leaves his intellectual demands unsatisfied. But at the same time, in the intellectual sphere man has only his intellectual demands, and he must not compromise with them in that sphere, but insist on them as if they were absolute; and the same is true in all the spheres. For only so can the demands receive discipline, i.e., undergo such modification as will bring them nearer to the nature of things.

The situation, we should never forget, must be taken in its entirety; and the situation in its entirety seems to justify the view that the disciplined demands arrived at by man in any sphere of his activity (e.g., pure intellect, or ethics, or religion) cannot be accepted as final unless in the end they square with the disciplined demands arrived at by man in all his spheres of activity.

VI

The present thesis, then, is, on its positive side, that values must function as *a priori* in the building up of experience, and on its negative side, that they are not ultimate or unalterable, but receive discipline, in the long run, in the development of experience. Thus without values, no knowledge of existence, no experience, no life. Values are posited *a priori* as *justificanda*. They are not posited as *justificata*. We have to "force them" on reality. They cannot be upheld in the long run unless they receive certification in the last detail and as a systematic whole by the facts. And this means, that their application to reality cannot be finally accepted unless it results in a view of reality as a whole and in detail which satisfies all the demands that man, as he then is, finds himself constrained to make; so that the science, philosophy, art, ethics, and religion of that day (if such there be) all have the same vision, all accept, without any disloyalty or sense of strain, the same thing.

If this ideal is felt to be impossible of attainment, it can nevertheless be used as a regulative conception, by means of which to bring clearly before oneself the enormous distance that man has yet to travel before his infancy is passed.

THE IMPLICATIONS OF MELIORISM CONCERNING THE RELATION BETWEEN VALUE AND EXISTENCE

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I

IN most of the discussions about the relation between value and existence, it has been assumed that value is a quality. On the traditional view that every judgment attributes a predicate to a subject, value is a predicate or quality of some subject or substance. But if value is a quality, it seems to be different from other qualities, and peculiar in some way. In explaining this difference, our philosophical tradition has fallen into three main lines. One group of thinkers starts from the assumption that since value is a peculiar quality, it must be a disguise for something else. Accordingly, we get innumerable definitional theories of value, which tell us that value is really pleasure, or satisfaction, or evolution, or causality, or what not. Another group asserts that value is subjective, that value is a tertiary quality which our feelings or affective attitudes add to the real qualities of objects. Finally, there is a group of thinkers who argue that value is a non-natural quality, which points to something beyond ordinary experience. These three systems, the definitional, the subjective, and the transcendental, have had untold influence on human thinking. But they do not seem to have solved our problem in an acceptable way, nor do they seem to be in the process of solving the problem. Accordingly, any other hypothesis should be developed and considered.

The theory now to be suggested is that all value is basically a matter of a relation. This relation may be called "betterness" or "worseness." On this theory, which might be called the relational, or perhaps the melioristic, theory of value, all value judgments, when analyzed, assert something about the relation of betterness. Value is betterness. Arguments for the doctrine that all the so-called value qualities, good and bad, right and wrong, beautiful and ugly, and the rest, can be logically analyzed into, and defined by, the relation of betterness, have been given elsewhere and cannot be repeated here. (*The Journal of Philosophy*, 12:105–106; 16:96–104; 18:197–209; 18:439.) Those thinkers to whom the previous arguments are unconvincing or unfamiliar, may regard the present theory either as a possible hypothesis or at least as a partial treatment of value. For, even if it is not granted that all value is about betterness, it is difficult to deny that betterness is at least one aspect of value. So our problem is as follows: If betterness is either all of value or at least one important part of value, what does betterness suggest about the relation between value and existence, and about the relation between value judgments and existential judgments?

We must make some three assumptions which can be briefly indicated. The first assumption is that relations may be treated as being genuine aspects of experience, which need not be reduced to qualities. In other words, the assumption is made that the work which culminates in Whitehead and Russell's *Principia Mathematica* has left relations and the logic of relations in no need of apology.

The second assumption is that we are dealing with value or betterness as it appears in reflective judgment. That we make reflective judgments about value seems certain. Some thinkers have attributed a greater importance to values as they occur in an alleged nonreflective experience. Since this matter seems to be highly uncertain and debatable, the present discussion will be confined to value as treated in reflective or judgmental situations.

The third assumption concerns what is traditionally called the distinction between intrinsic and extrinsic values. Much of the criticism of the misuse of this distinction, especially as argued by Professor John Dewey, seems sound. Moreover, a relational theory of value is not compelled to demand an absolute and artificial isolation of the objects of valuation. Nevertheless, it seems that reflective analysis must distinguish between the fact that one experience is directly better than another and the fact that something causes or contributes to an experience which is better than another. The facts about causal or contributory relations are logically distinguishable from the primary value facts. So what follows will be concerned only with what may be called direct betterness or value. The additional factors involving causal and similar relations cannot be considered here.

II

If value is entirely or partly betterness, the question may be raised concerning the entities between which betterness holds. What sorts of entities are better or worse than one another? What is the content of the value scale? Or, in the language of the logic of relations, what are *value relata?* The answer to this question raises many vexing problems, which will be discussed only in so far as is necessary for our main purpose.

The logically most simple examples of value relata may be found in the relation between two actual experiences. I look at a flat landscape and find it boring, then I look at a mountain view and find it thrilling, and the second experience seems to me to be better or more valuable than the first. So it may be suggested that the better relation does not hold between the objects contemplated, and it does not hold between my feelings alone, but it holds between the actual complex totalities of my experiencing in certain ways those specific landscapes. Of course the landscapes are included in the value relata as they are experienced, not as they might be in some allegedly different extra-experiential status. Similarly, my feelings and activities are included in the value relata, not as they would be according to this or that metaphysical theory, but simply as they are experienced.

Since experiences flow and merge into one another, there seems to be no reason for demanding that only sharply single experiences should be in the value scale. This totality of experience, whether in or about one individual or in or about a group or society of individuals, may be better or worse than another such totality. Moreover, the value relation may occur inside a process of experiences even if no sharply separated totalities are indicated. One continuous process may be judged to be in process of becoming better. However, for purposes of discourse, at least, it is usually convenient to treat the value relata as being at least relatively or logically separable totalities.

In addition to the actual experiences which we subject to comparative valuation, there are described experiences which we judge to be better or worse, even if one or both of the experiences are merely imaginary. We may have one experience but may judge that such and such an experience would be better than the one we have. More generally we may describe any actual experience that we have had or do have, or any imagined experience, and we may judge that the existence of condition A is, or was, or will be, or would be, better or worse than the existence of condition B.

In dealing with described experiences, we do not value hypothetical experiences simply in virtue of their described characteristics. It is the actual existence or occurrence of one described experience which is (or would be) better than the actual existence or occurrence of another described experience. In comparing the existence of an experience with the non-existence of the same experience, the same characteristics occur as describing the experience, but it makes a difference whether it exists or not. So we may say that the existence of experience A is (or would be) better than the existence of experience B. More abstractly, we may say that the existence of certain particulars or individuals having characteristics A is (or would be) better than the existence of certain particulars or individuals having characteristics B.

Then it may be that we judge that it is better not to have a certain experience than to have it. Here we seem to be asserting that the non-existence of certain particulars having characteristics A is (or would be) better than the existence of certain particulars having characteristics B.

So the value relation of betterness seems to hold between complexes involving the existence or the non-existence of particulars or individuals having certain described characteristics.

Incidentally it may be remarked that the problems in connection with non-existence seem to be especially open to debate. I do not make any metaphysical assertions about the relation of non-existence to existence. If one thinks that the apparent facts about non-existence or negative facts are to be explained in terms of positive or existential facts, one might still accept the main contentions of the present paper.

III

It seems probable that there are some relations, such as the spatial relation "longer" or "shorter," which hold between particulars as such. It might be debated whether there are genuine relations between universals as such. Whatever may be the case with other relations, it seems that value or betterness is what might be called an inter-factual relation. It is the fact that I have such and such an experience that is better or worse than some other fact. Other instances of inter-factual relations may be found in the logical relations of conjunction, implication, and so forth, however these relations may be analyzed. Perhaps the time relation of earlier or later holds primarily between factual events. The causal relation, however analyzed, seems to hold among facts. So there does not seem to be anything unique or peculiar in the fact the betterness holds between facts.

The only peculiar aspect of the betterness relation is the fact that it holds between existential facts whether they exist or not. That is, condition A, if it exists, will be or would be, better than condition B, if it exists. The betterness relation may be described as holding under hypothetical or modal circumstances. Moreover, value judgments, as in ethics, can be made about the comparative value of two conditions which are not compossible. When two or more alternatives of action are considered, it is normally the case that only one condition can exist then and there. Yet the two or more alternatives are considered, and a judgment is made that one alternative with its probable results is better on the whole than another alternative with its probable results. Here a relation is asserted between two entities which cannot both exist. This state of affairs clearly demands a modal or hypothetical logic.

It should be noticed that the object of logical evaluation is a judgment. However such categories as truth may be defined, logical value is primarily a matter of the relative reliability or trustworthiness of judgments. Strictly, neither a fact nor a proposition has direct logical value. It is only the complete judgment. Moreover, it is the existence of a judgment which can have positive value. The utility or other value of a judgment or belief is always hypothetical, being dependent on its existence, that is, whether some one actually has such a belief.

In regard to the much debated topic of the relation of existence to aesthetic value, it may be suggested briefly that the object of aesthetic value is the complete complex of the subject appreciating the object. We say the object is beautiful. Whatever may be the characteristics of the object as it appears or as it really is, direct value is found in the actually existing enjoyment of the object by some subject.

IV

If value is a relation between certain existential facts, it follows that value and existence cannot be sundered as two separate worlds, a world of existence and a realm of values. Value is a relation among the experiential factual complexes. Briefly, value is a relation among existences and non-existences. The fact that so and so exists is one type of fact. The fact that such an existential fact is better than another is a higher order or more complex type of fact than the first. Facts about value are to be put in their place among higher order facts, in the logical or mathematical sense of that phrase.

Logically the object of the value judgment seems to be similar to other facts about inter-factual relations. Value facts constitute one field among higher order facts. There does not seem to be any justification on logical grounds for asserting a crude dualism between value judgments and other judgments. I would argue, therefore, for a purely investigative and non-dogmatic approach to this problem. If the logical characteristics of value judgments are similar to those of other judgments, then it is a purely empirical question whether value judgments are different in principle from other judgments. Those who argue that value judgments are influenced by feeling, whereas other judgments are not so influenced, seem to be guilty of an excessively trusting attitude to human judgments about non-value facts. The relative functions of expressiveness and assertiveness, creativeness and discovery, among value and other types of judgments must be determined by detailed investigations. The question cannot be settled in an *a priori* or deductive fashion.

It so happens that the writer has recently finished a study which illustrates the possibility of investigation in this field, and pardon is asked for referring to it. As value judgments can be studied analytically with the help of the logic of relations, so they can be studied inductively with the use of correlational statistics. After a study had been made of the characteristics of judgments about the comparative moral value of certain practices, a parallel study was made of judgments about the comparative frequency of occurrence of the same practices (*The International Journal of Ethics*, 33:119–134; 34:254–271; 35:105–124). When the results were finished it was possible to compare in many ways a set of thousands of value judgments about certain topics with another set of judgments about frequency. Now frequency is clearly a non-value characteristic. So here we have one set of value judgments and another set of non-value judgments, both about the same topics and by the same persons. The question then arises, What are the empirically discoverable differences between the value judgments and the frequency judgments? Unless one asserts that value judgments differ from non-value judgments noumenally but not phenomenally, it should be possible to give precise answers to the question as to the relation between actual value judgments and other judgments. No attempt can be made here to draw conclusions from the experiments mentioned. But the point needs to be made that this is a problem which can be treated by the investigative method.

V

The theory of value as a relation allows for the recognition of value judgments as one type in a complex system of types of judgments. Value judgments seem to be predominantly similar to many other types of judgments. In asserting this view, the present paper is in opposition to much traditional philosophy, which tends to treat value judgments as markedly different from all other judgments.

But it must be insisted that value judgments do occupy a distinct class. Not all judgments are about the relation of betterness. So value judgments and non-value judgments cannot be identified. Moreover, value judgments logically presuppose, at least hypothetically or modally, certain judgments or assumptions about existence or non-existence. So certain judgments about existence seem logically prior to value judgments.

Here we must guard against a confusion. A recent tendency reacts from the old extreme of separating value judgments too sharply from others, into the opposite extreme of identifying value and non-value judgments. But a judgment about the frequency of a moral practice is different from a judgment about the comparative value of that practice. The judgment about frequency may itself be influenced by value judgments and may itself be the object of a value judgment. But the judgment about frequency is not itself a value judgment. Frequency is not betterness and a judgment about frequency is not a judgment about value. All judgments can be valued, but not all judgments are about value.

VI

Our results may be summarized as follows:

If the thesis of meliorism, that value is to be analyzed as the relation of better or worse, can be accepted as either a complete or a partial explanation of value, then it follows that value is a relation among facts of experience, among facts about the existence or the non-existence of certain factual complexes. There are other instances of similar relations among factual complexes. So value is simply one relation among those that hold between factual complexes involving existence or non-existence. With the help of the logic of relations we can analyze the relation of betterness and see its logical characteristics. With the help of correlational statistics, and perhaps with many other empirical devices, we can make inductive studies of actual value judgments, in order to compare them with other non-value judgments. With an investigative point of view, the entire problem of value must be surveyed afresh. Whatever may be the outcome of future investigations here, it seems certain that the old treatment of value as a quality set over against existence, with value judgments contrasted to existential judgments, must be entirely abandoned.

SECTION 4

Time: Friday, September 17, 9.30 A.M.
Place: Gore Hall Common Room
Subject: Open Session
Chairmen: H. W. STUART, Leland Stanford
WALTER T. MARVIN, Rutgers

DAS ERKENNTNISPROBLEM IM LICHTE DER PHILOSOPHIE JOHANNES REHMKES

J. E. HEYDE
(*Greifswald*)

IM folgenden will ich einen Weg zeigen, auf dem eine grundsätzliche und endgültige Auflösung des Erkenntnisproblems möglich ist.

Es versteht sich von selbst, dass eine Bewältigung der Erkenntnisfrage gar nicht möglich ist ohne eine Rückschau auf die Geschichte der Erkenntnistheorie. Dabei ist es vor allem nötig, sich darüber einmal klar zu werden, dass sich in der Regel die Frage nach der Erkennbarkeit gar nicht sämtlichen Gegenständen überhaupt zuwendet, sondern von vornherein auf eine ganz bestimmte Gruppe von ihnen, auf die Gegenstände der sog. Aussenwelt eingeschränkt wird, deren Erkennbarkeit in erster Linie dem zur Wissenschaft erwachten Bewusstsein problematisch erschien.

Für das vorwissenschaftliche Bewusstsein gibt es freilich noch kein Erkenntnisproblem. Denn ihm ist ja nicht nur die Gegenüberstellung von Innenwelt und Aussenwelt, von Immanenz und Transzendenz, sondern auch der Gegensatz von Ich und Nicht-Ich, von Erkenntnis-Subjekt und Erkenntnis-Objekt noch völlig unbekannt. Zwar kennt es natürlich die Objekte der Wirklichkeit, aber weder kennt es diese als seine Erkenntnis-Objekte, noch kennt es sich selbst schon als ihr Erkenntnis-Subjekt. Das ist erst möglich nach dem Zustandekommen des Selbsterlebnisses, in dem es sich selbst seinem Wesen nach in seiner Eigenartigkeit und damit zugleich auch die ihm wesensfremde Körperwelt in ihrer Andersartigkeit entdeckt. Aber erst in dem Augenblicke, wo der Mensch diese Verschiedenheit von erkennendem Ich und erkanntem Nicht-Ich in eine Geschiedenheit voreilig umdeutete, in dem Augenblicke also, wo er diesen Gegensatz nun im wahren Sinne des Wortes zu einer Gegenüberstellung von Innenwelt und Aussenwelt umdachte, da wurde das Erkenntnisproblem geboren, die Frage nämlich, wie bezw. ob es möglich sei, dass ein dem Subjekt gegenüberstehendes Objekt der Aussenwelt nun dennoch als Erkenntnisbesitz im Bereich des Bewusstseins erscheinen könne; m.a.W. die Frage: (Wie) ist intrasubjektives Erkennen von transsubjektivem Gegenstand möglich? Kurz: Wie kann ich in mir die Welt ausser mir erkennen?

Auf diese Grundfrage sind im geschichtlichen Verlauf der Erkenntnistheorie verschiedenfache Antworten gegeben worden, die sich in drei Hauptgruppen aufteilen lassen. Das sind 1) die psychologische Erkenntnistheorie, d.h. der Empirismus, der das Zustandekommen der Aussenwelt-Erkenntnis aus einem passiv-rezeptiven Verhalten der Seele erklärt, nämlich aus einer Einwirkung seitens der objektiven Aussenwelt in die subjektive Innenwelt hinein; 2) die logische Erkenntnistheorie, der Rationalismus, der das Zustandekommen der Aussenwelt-Erkenntnis aus einem aktiv-spontanen Verhalten der Seele erklärt, nämlich aus einer schöpferischen Auswirkung der denktätigen Seele von innen her nach aussen hin; 3) die psychologischlogische Erkenntnistheorie, der Kritizismus, der beide Erklärungsversuche mit einander verschmilzt.

Der Empirismus versucht das Erkenntnisrätsel von der intrasubjektiven Erkennbarkeit der transsubjektiven Objekte mit Hülfe der Abbildtheorie zu lösen: die Einwirkung seitens der Objekte in das Subjekt hinein besteht hiernach in der Herstellung von Spiegelbildern im Subjekt: die objektiven Gegenstände sind die Urbilder, die subjektiven Zustände deren Abbilder. — Freilich musste sich bei einiger Nachprüfung bald zeigen, dass die subjektiven Erfahrungszustände nicht durchgehend als Abbild objektiven Gegenstandes gelten konnten. Zuerst erkannte man bekanntlich die Subjektivität der sog. sekundären Qualitäten, die man zunächst als objektive Urbilder für subjektive Zustände angesehen hatte. Als nun Berkeley ausserdem auch die primären Qualitäten für etwas nur Scheinbares, Subjektives, (Phänomenon, Idee) erklärt hatte, war von der objektiven Aussenwelt garnichts mehr übrig geblieben, was als objektives Urbild subjektiven Zustandes noch hätte gelten können. Das gesamte Objektive war subjektiviert, die Gegenstände der objektiven Aussenwelt waren samt und sonders zu subjektiven Zuständen der Innenwelt gemacht worden. Es gibt jetzt nicht mehr zwei Welten, eine Aussenwelt und eine Innenwelt, sondern nur noch eine Welt, die Innenwelt der Phänomene, der Ideen. Im Unterschied zu dem objektiven Erkenntnismonismus des vorwissenschaftlichen Bewusstseins (der von einem objektiv-subjektiven Erkenntnis-Dualismus abgelöst worden war) haben wir jetzt in dem Phänomenalismus oder Idealismus nach Art Berkeleys einen subjektiven Erkenntnismonismus, einen Subjektivismus vor uns. — Es ist klar, dass eine solche Behauptung, die nur das Subjekt bezw. nur seine Vorstellungen gelten lassen will, bereits Solipsismus ist, der natürlicherweise das Ende aller Erkenntnis, ja aller Wissenschaft überhaupt bedeutet.

Es ist nun überaus beachtenswert, dass auch die logische Erkenntnistheorie, der Rationalismus, zu demselben solipsistischen Ergebnis gelangen muss. Denn, wenn nach seiner Behauptung die zu erkennende Aussenwelt der objektiven Gegenstände geschaffen wird durch eine intrasubjektive Erkenntnis-Tätigkeit, dann lässt sich alles auf diese Weise Erkannte auch nur als intrasubjektives Gebilde verstehen, und niemals kann dann bewiesen werden, dass diese subjektiven Denkgebilde doch objektive, d.h. transsubjektive Sachgebilde seien oder darstellen. Es kann also im Rahmen eines folgerichtig durchgeführten Rationalismus auch nur Subjektives, nur Phainomena, nur Ideen im Subjekt geben, was aber eben zu einem reinen Subjektivismus und weiterhin zu einem Solipsismus führen muss.

Diesen subjektiven Idealismus durch einen Kritizismus zu überwinden, hat sich bekanntlich I. Kant aufs angestrengteste bemüht. Ist es ihm aber wirklich gelungen? — Wenn er einesteils (nach Art des Empirismus) die Erkenntnis auf die Erfahrung, also auf die Innenwelt der Vorstellungen im Subjekt einschränkte und somit die Unerkennbarkeit des Dings-an-sich, d.h. der Aussenwelt behauptete, gelangte auch er, eben infolge seiner Verneinung der Aussenwelt, zu einem subjektiven Erkenntnismonismus. Und wenn er nun auch anderseits mit Hülfe seiner transzendentalen Methode (nach Art des Rationalismus) die Welt der objektiven Gegenstände wiederzugewinnen hoffte durch schöpferische Denktätigkeit, so konnte er mit diesen vom Subjekt und im Subjekt erzeugten Gegenständen genaugenommen doch nicht über die Grenzen des Subjektes hinausgelangen: die sog. transzendentalen Gegenstände sind trotz aller gegenteiligen Versicherung der Kantianer im Grunde doch weiter nichts als intrasubjektive Erzeugnisse, weil es unfasslich bleibt, wie und woher diese Denkgebilde die Fähigkeit bekommen sollten, nun Gegenstände unabhängig und jenseits vom Bewusstsein zu werden. Wie sehr der Kantianismus im Grunde ein subjektiver Erkenntnismonismus, ja sogar ein Solipsismus ist, beweist vor allem die deutsche Philosophie nach Kant in allen ihren

Formen bis zum Positivismus Machs, der ja nur die Innenwelt der Empfindungen gelten lassen möchte.

Gewiss haben in neuerer Zeit energische Versuche mannigfacher Art eingesetzt, die verloren gegangene Aussenwelt wiederzuerobern. Man muss sich aber bei der Beurteilung dieser Bemühungen darüber klar sein, dass diese Versuche grundsätzlich betrachtet, allesamt ergebnislos sind, ja ergebnislos sein müssen. Der Schein ihrer Gewissheit beruht einzig und allein auf dem Mangel ihrer Folgerichtigkeit. Denn wenn gemäss dem Immanenzsatz Descartes' alle wissenschaftlichen Bemühungen nur ausgehen können und dürfen von dem, was das Subjekt innerhalb seiner Bewusstseinsgrenzen vorfindet, wenn sich alles irgendwie Gegebene dem Subjekt nur innerhalb des Bewusstseinsbezirkes kundtun kann, dann ist es grundsätzlich restlos ausgeschlossen, dass das Subjekt in der Innenwelt seiner Vorstellungen etwas vorfindet, was ohne inneren Widerspruch den Namen eines transsubjektiven (ausser- oder überindividuellen) Gegenstandes der Aussenwelt verdienen könnte. Wo auch immer neben der Innenwelt eine Aussenwelt behauptet worden ist, gleichviel, ob auf dem Wege des Beweises (demonstrativ) oder ob auf dem Wege des Erlebnisses (intuitiv), da ist dies tatsächlich geschehen im schneidenden Widerspruch zu der Voraussetzung des intrasubjektiven Charakters alles Erkennens: immer ist stillschweigend die Aussenwelt bereits angenommen worden, die doch erst bewiesen werden sollte. Denn, wenn es nach diesen Theorien tatsächlich Erkenntnis gibt, so kann sie keinen äusseren Gegenstand enthalten, da der sog. Erkenntnis-Vorgang rein intrasubjektiver Natur sein soll; und wenn es tatsächlich äussere Gegenstände gibt, so können sie dem Subjekt nicht zur Erkenntnis kommen, da die Gegenstände transsubjektiver Natur sein sollen: was innen ist, kann nicht zugleich auch Aeusseres sein; und was aussen ist, kann nicht zugleich auch Inneres sein.

So stehen wir also vor einem gänzlich unlösbaren, ja rätselhaften Problem? Die Theorie der Erkenntnis muss, wenn sie nur folgerichtig verfährt, schliesslich zu der Behauptung gelangen: es gibt keine erkennbare Aussenwelt! Und doch lehrt uns die Praxis der Erkenntnis: es gibt eine erkennbare Aussenwelt! Die Fehlerquelle für die Ergebnislosigkeit der bisherigen Erkenntnistheorie aufgedeckt zu haben, ist das Verdienst Johannes Rehmkes. Und zwar ist es, wie er nachweist, letzten Endes ein merkwürdiger Materialismus, der die Philosophie noch immer beherrscht trotz aller fortschreitenden Abwendung von materialistischer Weltauffassung. Gewiss, das steht zwar für die Erkenntnistheorie schon seit langem fest: nicht eigentlich der ganze Mensch, also nicht die gesamte psychophysische Einheit von immaterieller Seele und materiellem Körper darf als Subjekt des Erkennens bezeichnet werden, sondern nur einem Stück dieser Einheit, nämlich allein dem immateriellen Bewusstsein des Menschen, kann die Bezeichnung „Erkenntnis-Subjekt“ zukommen, weil allein das Bewusstsein durch Wissens- und Erkenntnis-Fähigkeit ausgezeichnet ist. Aber trotz dieser ausdrücklichen Betonung des immateriellen Charakters des erkennenden Bewusstseins ist tatsächlich doch die bisherige Wesensbeschreibung des immateriellen Bewusstseins noch so unzureichend und so unvollkommen geblieben, dass sie in der Tat immer wieder in eine materialistische Auffassung des doch immateriellen Bewusstseins zurückfällt. Es genügt nämlich durchaus noch nicht, die Immaterialität allein durch den Begriff „Unausgedehnt“-„unräumlich“ zu beschreiben und zu sagen, das erkennende Bewusstsein sei von materiellen Gegebenheiten, wie z.B. Baum, Stein dadurch grundverschieden, dass es sich nicht wie diese auszeichne durch die Materie-Eigentümlichkeit der Ausdehnung, nämlich durch Grösse und Gestalt! Wer die Immaterialität des erkennenden Geistes voll und ganz begreifen und erfassen will, der muss sich zu der nicht ganz leichten Einsicht durchringen, dass das immaterielle Bewusstsein nicht nur ohne Grösse, nicht nur ohne Gestalt ist, sondern sogar ohne Ort sein muss! Denn auch die Oertlichkeit, das Irgendwo-sein-können ist ebenfalls eine reine Materiebestimmung. Man stelle sich doch nur probeweise einmal etwas Beliebiges vor an einem Orte, als irgendwo befindlich: bei ehrlicher Selbstprüfung wird man immer feststellen, dass wir dies irgendwo Befindliche stets nur denken können als etwas Ausgedehntes, Körperliches, Materielles. Was irgendwo sein kann, was sich an einem Orte befinden kann, muss stets etwas Materielles sein! Daraus folgt aber für uns umgekehrt: was schlechthin immateriell ist, was sich also von Materie grundverschieden ist, muss vor allem auch ohne Ort sein, kann unmöglich Ort besitzen. — Man wird mir gewiss einwenden, dieser Gedankengang sei nur eine einbegrifflich gewonnene Deduktion, in Wirklichkeit aber könne das Bewusstsein doch gar nicht ohne Ort existieren. Das Gehirn, also ein Teil des menschlichen Leibes, sei doch bekanntlich der Aufenthaltsort des menschlichen Geistes. — Gut! Dagegen zuerst dies: wie seltsam, dass die Philosophen immer nur von dem Geist, von der Seele, zu reden pflegen, als ob sie ihnen als etwas Fremdes gleichsam gegenüberstünde; wer über die Seele, über den menschlichen Geist, nachdenkt, denkt doch tatsächlich über sich selbst nach, über sich diese besondere Seele, diesen besonderen Geist: ich bin doch selbst die zur Untersuchung stehende Seele, der zur Untersuchung stehende Geist! Und nun lege man sich einmal die Frage vor: Wo, in welchem Teile, in welchem Muskelstrange des Gehirnfleisches wohne ich-Seele denn? — Niemand vermag diese Frage zu beantworten. Und doch müsste jedes Bewusstsein, zumal es doch ein Wissenswesen ist, ohne weiteres wissen und ohne Zögern angeben können, wo d.h. an welchem Orte des Gehirns es sich befindet und haust, wenn es wirklich einen Ort hätte! — Es gehört also in der Tat zum Wesen des immateriellen Bewusstseins, dass es in keinerlei Hinsicht irgend eine Uebereinstimmung mit materiellen Gegebenheiten aufzuweisen hat, dass es mithin völlig ortfrei ist. Und wer nun doch in der Weise, wie man bisher die Seele aufzufassen pflegte, behauptet, sie müsse an einem Orte sein, von dem können wir sofort sagen, er muss sich die Seele als ein materielles Gebilde vorstellen, vielleicht als einen ganz kleinen Körper, als ein Pünktchen oder Körnchen. Denn, wie bereits erwähnt, was an einem Orte sein kann, ist stets etwas Materielles. Die Seele irgendwo zu lokalisieren, ist und bleibt demnach krasser Materialismus. Die Immaterialität des erkennenden Geistes ist erst dann völlig und richtig zu Ende gedacht, wenn man ihre schlechthinnige Ortlosigkeit einsieht.

Was folgt aber nun aus dem immateriellen Charakter des Bewusstseins für die Theorie der Erkenntnis? Es ist nicht zuviel gesagt, dass die Reinigung des Bewusstseinsbegriffes von den Schlacken der Oertlichkeit eine bedeutsame philosophische Umwälzung nach sich ziehen muss. Wenn nämlich das menschliche Bewusstsein schlechthin ortlos ist, dann ist es natürlich auch ausgeschlossen, nun auf das ortlose Bewusstsein irgendwelche, ihm völlig wesensfremde Ortsbegriffe anwenden zu wollen. Es widerspricht daher durchaus dem Wesen des Bewusstseins, anzunehmen, zwischen einem materiellen, orthaften Einzelwesen, z.B. einem Baum, und dem immateriellen, ortlosen Bewusstsein sei irgend ein räumlicher Abstand, eine Entfernung möglich. Für ein Wesen, das sozusagen über Raum und Ort völlig erhaben ist, gibt es daher weder ein Fern noch ein Nah, und darum auch nicht ein Innerhalb oder ein Ausserhalb; denn solche Ortsbegriffe, wie In und Ausser widerstreiten ja ganz und gar den unörtlichen Charakter des Bewusstseins. Es ist somit gänzlich ungereimt, von intrasubjektiv, von immanent, von Bewusstseinsinhalt, von einer Innenwelt des Bewusstseins reden zu wollen, als ob das Subjekt ein Hohlraum oder ein räumlich begrenztes Feld, ein flächenartiger Bezirk wäre, in dem irgendetwas Platz nehmen könnte. Und ebenso ungerechtfertigt ist es, von Bewusstseins-Transzendenz, von Transsubjektivität, von „Hinausweisen über das Bewusstsein,“ von einer ausser- oder überindividuellen Welt zu reden, als ob diese angebliche Welt jenseits des Bewusstseins ihm gleichsam gegenüberstünde oder über ihm stünde. — Freilich wird man mir Zweierlei einwenden und entgegenhalten wollen. Erstlich: die philosophischen Fachausdrücke, wie Bewusstseinsinhalt, immanent, intrasubjektiv usw. seien garnicht wörtlich in ihrer ursprünglichen Ortsbedeutung zu verstehen. Darauf ist zu erwidern, dass ihnen tatsächlich doch, wenn auch unbemerkt, noch immer eine bestimmte örtliche Auffassung zugrunde liegt, ja dass diese Fachausdrücke völlig ihres Sinnes verlustig gehen würden, wenn man allen Ernstes von ihrer ursprünglichen örtlich gemeinten Bedeutung (intra, trans!) absehen wollte. — Wer nur ehrlich genug ist, wird bei sorgfältiger Selbstprüfung finden, dass er diese bildhaften Ausdrucksweisen trotz aller Betonung ihres blossen Bildcharakters im Grunde doch wörtlich, d.h. örtlich versteht. Der zweite Einwand richtet sich gegen unsere Leugnung der Aussenwelt. Nun, natürlich gibt es eine materielle, körperliche Aussenwelt, aber nur in Beziehung auf den ortsbestimmten materiellen Leib der Menschen, nicht jedoch in Beziehung auf das ortlose immaterielle Bewusstsein des Menschen. Und das ist für die Erkenntnisfrage das Entscheidende! Nur weil das erkennende Bewusstsein des Menschen nicht räumlich und örtlich gebunden ist, nur weil es für das immaterielle Bewusstsein keine örtlichen Grenzen und Schranken geben kann, ist es imstande, die Welt ausserhalb seines Leibes unmittelbar zu erkennen, ohne dass also zwischen dem erkennenden Subjekt und dem erkannten Objekt noch ein Mittelreich, eine Zwischenschicht von Vorstellungen eingelagert wäre. Das reale Objekt selbst ist es, das sich dem unörtlichen Bewusstsein unmittelbar kundtut. Wenn wir also z.B. ein Ding als Baum erkennen, dann steht nicht etwa vor dem wirklichen Baum-Gegenstand noch die Baum-Vorstellung, gleich als ob das Bewusstsein es beim Erkennen mit zwei wesensverschiedenen Einzelwesen zu tun hätte. Der Begriff „Vorstellung-Vorgestelltes“ ist mithin kein Wesensbegriff, sondern ein Beziehungsbegriff. „Baum-Vorstellung“ im Sinne des vorgestellten Baumes meint nicht ein wesentlich Anderes, vom realen Baum Verschiedenes, sondern eben diesen einen realen Baum selbst, d.h. dieses eine Sachgegebene selbst, freilich nicht in seinem Wesen, sondern eben in seiner besonderen Bezogenheit auf ein Zweites, nämlich auf den augenblicklichen psychologischen Bewusstseins-Zustand irgend eines Erkennenden. Es gibt demnach nicht zwei wesensverschiedene Erkenntnis-Welten,

eine Welt von (inneren) Vorstellungen und eine zweite Welt von (äusseren) Gegenständen, sondern nur eine Welt von Gegebenheiten, aber in zwiefach möglicher Betrachtungsweise, einmal in ontologischer d.h. Wesens-Betrachtung, und dann in psychologischer, d.h. in Beziehungs-Betrachtung.

Das Ergebnis der Untersuchung J. Rehmkes lässt sich also folgendermassen zusammenfassen:

(1) Es gibt nur eine Welt der Erkenntnis.

(2) Es gibt zwei Möglichkeiten für die Betrachtung dieser einen Erkenntniswelt.

Beide Sätze ergeben sich aus der grundlegenden Einsicht:

(3) Es gibt zwei voneinander in ihrem Wesen zwar verschiedene aber nicht geschiedene Welten: die Welt materieller und darum orthafter Körper und die Welt immaterieller und darum ortfreier Bewusstseinswesen.

THOUGHT CONSIDERED AS ACTION AND THE LOGICAL AXIOMS

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IMAGINE a person returning after a short absence to his closed room and finding on his desk a bouquet of flowers that was not there when he left. The person in question can make different hypotheses to explain the strange appearance. The choice will depend partly on his usual turn of mind, but also on his attitude at the moment. The most simple of those hypotheses would be to admit that somebody deposited the bouquet after getting, in some natural way, the key to the room. But the very simplicity and positiveness of the hypothesis would make it unattractive to several types of mind. They would prefer to believe that some supernatural being, a fairy queen or a demon, had performed the miracle. However strange and improbable, this supposition might be preferred on account of its attractiveness. The joy of considering himself favored by some superior being will recompense the dreamer for the lack of probability.

Nevertheless this preference will not stand the test of a return from reverie to the mood of active life which exacts a more positive attitude in view of the perils of a deception. At the very moment when our dreamer thinks of the danger he is exposed to if a stranger holds a key to his room, he will take leave of his hypothesis and adopt some less fantastic view.

The two opposed solutions which we have just considered illustrate two very different types of thinking. We shall call one of them *effective*, the other *contemplative*. It may be easily perceived that the first one corresponds to the active attitude, the other one to the attitude of the dreamer. Purpose dominates the first type; pleasure, the second. The former is an *act*, the latter an *activity*.

The difference in these two types of mind explains easily the small success poets and philosophers have in practical life: they are concerned rather with the pleasure of thinking or musing than with its effect.

This distinction between types of thinking, founded upon the attitude of the thinker, is not to be confused with another which depends on the structure of the product. I have in mind the distinction between associative and discursive thinking. The difference between these two types rests on a series of characters which can be briefly enumerated in the following diagram:

Structure	*Associative*	*Discursive*
elements	images	symbols
connection	associative	logical (founded on logical axioms)
relation to the will	non-voluntary (leads us)	voluntary (is led by our will)
objectivity	individual (the associative connection being a fruit of individual experience)	universal (the principles of logic being the fruit of common experience of the race)
as to the effect	ineffective	effective

From the example proposed in the beginning (dreaming on the one hand and positive disposition on the other) it would seem that the two members of both divisions coincide: dreaming is really an associative thinking. But what is science? No one can doubt of its belonging to contemplation. It does not set up other aims than research for the sake of knowledge which is disinterested in the sense of not being connected with any directly practical purpose. Nevertheless science is in the highest degree effective. Why? Because it uses discourse instead of association. We can say, then, that science is a contemplation using the ways of effective or active thinking. It is a product of a long and painful synthesis of these two elements, a synthesis which can be discovered by studying its footprints left in the history of science and logic.

If we ask the reason for the efficacy of discursive, as contrasted with the sterility of associative thinking, the answer is that the former supplies the rule of conduct. This rule rests on the reactions of things to our attitude (active or passive) towards them. We behave quite differently towards a rapid train appearing suddenly on the path which we intend to cross, and to the view of an inoffensive being approaching us. In both cases we follow the rule given by our former experiences. But in order to form a general rule, objects must be gathered in groups of uniform reaction. That is the beginning of logical classes or concepts. Their formation is favored by an unformulated provisional postulate, which is justified by an average (not constant) success, to the effect that the similarity of appearance is connected with similarity of property. We can call this the postulate of the synthesis of sensibility and of discourse. Those groups, then, are formed by our attempts to act in regard to the necessities of life.

We touch here upon a series of logical problems often discussed. The first one is the relation of a concept to a law. Every one who has studied the work of the eminent logician Sigwart remembers that he distinguishes two functions of induction considered by him as different: the establishment of laws and the formation of "really valid concepts." The meaning of this description is easily understood. We remember that there are two ways of forming concepts. The first is *a priori* and consists of positing *a priori* a character which circumscribes the extension of the concept as expressed by the formula:

$$x \ni (x \mathsf{E} a)$$

$$\underbrace{x \ni \overbrace{(x \mathsf{E} a)}^{\text{law}}}_{\text{concept}}$$

The concept can be "null," i.e., its extension may be = 0. This can happen in two different ways: 1) either the characters joined in the concept *a* are contradictory (logically null class), — a quadrangular circle; or 2) they are not contradictory, but the objects having this determination do not exist in reality and thus form an empirically null class (a "green man"). The first only are admitted as "existing" as soon as it has been proved that the determination does not contain contradictions; such, for instance, as the concept of a logarithm.[1]

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[1] We do not always reject even contradictory determined concepts, such as $\sqrt{-1}$. Mathematicians have the honesty to name them, "imaginary."

This is the meaning of the symbol $\exists$, when read "exist" (Professor Peano): $\exists\ ab$ means that there is no impossibility in the existence of individuals with the character ab (a = green; b = man), but that gives no assurance that such objects have actual existence, as is sometimes supposed. In reality the equivocal character of the symbol has led to many false conclusions; among others to the affirmation of the invalidity of the syllogistic figures' giving a particular conclusion from universal premises. I shall not insist on this point. What is of interest for our subject is the other group of concepts, those formed by induction. Here belong such concepts as "white men," "black men," "red men," and all other determinations of really existing races.

Now one can easily see that the formation of "really existing concepts" is only the counterpart of the formation of such primitive regularities as can be considered embryos of strict scientific laws. The formula $x\exists(x\epsilon a)$ contains both; it affirms that every x must submit to the rule of being a and determines every individual of the class a. That it is so can easily be seen from the difficulty of finding a strict boundary between a law and a concept.

We can now formulate here the logical meaning of the third logical axiom, that of the excluded middle. It states the distinction of "really valid concepts" from the ideal ones, created *a priori* as we find them in mathematics. Every logical concept is sharply cut off from every other. It is otherwise in mathematics; every magnitude passes gradually into every other.

One sees from the preceding that if we can with some reason consider associative and discursive thinking as two steps on the way of progress it would be quite improper to admit the same relation between contemplative and effective thinking. These two ways of thinking coexist from the first steps of the human being on earth and will coexist indefinitely as the leading minds of the highest civilizations devote their lives to such contemplative work as creation of science and of art.

Let us now consider the parallelism existing between the interior act of thinking and the exterior one of doing, by which the organism is put into reactive attitude towards the surroundings. The lowest form of the reaction of organic substance to the *milieu* is the tropism. In higher organisms it takes the form of a reflex, which is the automatic response of an organism to an irritation. Following a physiological law, the simple reflex, if not successful in putting aside the irritating object, will be transformed into a complex reflex inducing activity in new groups of muscles. But every one of those potential movements can be stopped by the activity of "moderating centers" of the brain. So voluntary movement is the result of the inhibitions by higher centers of those automatic reactions which follow the natural proclivity of the physiological organism. This selection out of many movements possible to the organism forms the main feature of voluntary movement.

The same process appears in the formation of concepts. We make a choice out of several features of our thought, repressing the others. This is the way by which we attain identification of different objects. We can identify sugar with snow in so far as they are both white objects; a man with an elephant in that both are mammals; with a plant, in that both are living beings, and with the sun, in that both are material objects. This is the meaning of the principle of identity, which enables us to introduce unity among all the objects of our thought.

Out of many features of the object presented by associative thinking we select only such as enable us to state the identity. William James's ingenious theory of the syllogism is a perfect explication of our reasoning. "The essence of a thing," he says, "is that one of its properties which is so *important for my interests* that in comparison with it, I may neglect the rest." (*Principles of Psychology*, II, 335.) This essence (of the older logicians) is the feature on which we decide to base our identification stated in the minor premise. Out of many ideas offered by associative thinking we make a voluntary selection relevant for our aim, just as we do from numerous physiologically offered possibilities of movement. Effective thinking, which is voluntary, is a selection of the same type and based on the same principle as voluntary action.

We are obliged nevertheless to add two remarks to these conclusions. The one concerns James's definition of reasoning. The word "interests" which he uses does not necessarily mean the biological interests of the organism, but any interest even of a most fanciful kind. The other remark bears upon the difference in the way of getting connections of ideas and of movements. In the first case, the associative connections are purely individual and accidental, depending on the individual experience; in the second, they are the fruit of a phylogenetic adaptation and are founded upon the experience of the race. It follows that while these are best adapted to the necessities of the organism as a biological unit, the former offer the greatest degree of possibility of forming very diverse and numerous combinations: one may say an infinite perspective of novelty.

The first of these remarks leads us to define our attitude toward the problem of our paper more explicitly. The correlation of thought with action has been, as is well known, the object of pragmatism. While admiring the brilliance of its conceptions and freely and thankfully acknowledging the stimulation which the author has received from the creators of this doctrine, he must confess that, although it has contributed to the development and completion of the views to which he was led by his studies in the logic of the sciences, he is not a true disciple of pragmatism. The attitude adopted by pragmatism may be specified as biological. Its main tenet is that thinking is only a mediating link between sensation and action; its principle is that of evolutionary psychology (H. Spencer), the continuity and homogeneity of psychical life from its lowest forms to the highest.

The author's position could be characterized rather by the term suprabiological, in the provisional sense of going beyond the biological point of view. Its principle is that psychical functions, primarily closely connected with certain biological purposes, can develop far beyond their first embryos and sometimes grow in a direction quite opposite to that indicated by the biological function from which they have sprung. Practical curiosity develops into disinterested search for truth in science; the sexual instinct, into pure love, etc. Thus man is led to conceive aims not necessarily connected with those purely organic necessities that have their root in the purpose of preserving his individual existence and that of his race.

The domain from which those aims flow is that of contemplation; namely, that part of it which is dominated by affective life. This is the nursery of our ideals. In very close contact with it is the philosophy which faces reality from a unifying aesthetic point of view and offers itself as substitute for prehistorical and prelogical philosophical myths.

The aims proposed by man are inspired particularly by his character as a social being. He seeks to create an intellectual and spiritual world in common with his neighbors. The *consensus omnium* is its leading principle. Man tries to elaborate in this sense the image of reality created by unintentional prelogical activity ("zweckthätig aber nicht zweckmässig" of German thinkers). This picture, the "given reality" of the philosophers, is based upon the biological principle of the relation of the organism to its environment. It is a product of a long phylogenetic evolution.

We can speak, then, of two kinds of connection in the work of constructing reality: the conscious and the unconscious: — *hori-*

zontal connection, between contemporary living people is the character of the first; *vertical connection*, resting on hereditary and evolutionary factors, is the main feature of the second.

We should like to note here that these two kinds of connection correspond to the constitutive elements of truth: — vertical connection, to the *conformity with things;* horizontal, to the *community of beliefs of the members of a society*. This last, in prelogical thinking, takes the forms described by Professor J. M. Baldwin as catholicism of opinion or syndoctism; in the logical, as synnomism, community of beliefs based on common laws of thinking. There is a third element of truth, coherence, to which we shall soon pass. But first we wish to define the term "reality" which we have just used.

There is scarcely a term so equivocal as reality. Non-philosophical minds have no doubt that there is only one kind of reality, that of our sensibility. But do we not go beyond sensibility when we admit the movement of the earth instead of that of the heavens? Which of these two is the reality for an educated man? And which do we regard as real, the sound or the vibration of the string of a musical instrument? We perceive both, it is true, though with different organs. On the other hand, psychology teaches us that our image of the world, which is so homogeneous, is not a pure sensation, but is constructed with the help of processes quite analogous to our reasoning, at least as regards the result, although in intuitive form and very probably carried out by an intuitive method.

William James, in his *Principles of Psychology* (II, 291 ff.) enumerates a number of realities beginning with insane delusions and individual beliefs and ending with the ordered world of science. These realities not only coexist, but also form a hierarchic order, resting on the fact that, when we reach a higher one, we are not able to believe in the reality of the lower one. In my paper at Naples (1924) [2] I tried to show that the hierarchic relation depends on the extension of its compass. For a primitive intelligence everything had its proper time; sound and vibration may both be real because each exists in a different time. But as soon as unifying activity begins to order our conceptual world, we are obliged to choose one of them. Then we include both in the same time.

How is it done? A naïve mind considers as real everything which is not contradicted, — fiction, myth, illusion, or delusion. But as soon as contradiction appears he must make the choice. We see from this that contradiction is the instrument to prove whether our little universes of discourse, circumscribed by their times, are united or not.

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[2] See "La fonction logique du temps" in the *Atti;* also "La pluralité des temps" in the *Revue Philosophique*, Sept.–Oct., 1924.

The logical device whereby is brought about the fusion of universes of discourse hitherto separated, is the transfer of contradictory elements into the realm of illusion. Just as the juridical unification of two territories previously under different legal codes requires the annulment of conflicting laws, so the logical fusion of two realities, each corresponding to a distinct universe of discourse and subject, as it were, to diverse logical jurisdictions, requires the exclusion of incompatibilities, if the resultant whole is to be coherent. Now it is impossible to exclude that which belongs to the sensible world. Our external impressions force themselves upon us with an imperious necessity. We can, however, interpret them anew and thereby reconcile them with a coherent reality. This we do by considering them as illusions. Every preception which possesses material truth but is devoid of formal truth is an illusion. That is the postulate of exclusion. Material truth is conformity to intuition; formal truth is the structural coherence within the universe of discourse. That is the logical function of the principle of contradiction.

Illusion as a conceptual means of unification is not peculiar to science. It is found also in pre-scientific thought. That which distinguishes its application in science from its pre-scientific employment is that, whereas in science one requires that illusion be explained by the conditions of its appearance, — that is, made coherent with the totality of experience and shown to be inevitable under existing conditions, — in the pre-scientific phase, one is satisfied with an affirmation accompanied by what Peirce called the "method of tenacity."

We find an interesting example in a biographical note upon Radloff, written by our eminent compatriot and friend, Baudouin de Courtenay. The Russian linguist had been reproved by his housekeeper for working on saints' days and especially on the day consecrated to the virgin, a day whereon, according to the assertion of this lady, even the birds suspended their nest-building activities. Now it happened that upon one of these very days Radloff perceived a swallow building its nest. He ran quickly to find his housekeeper and conducting her to the window, pointed out the undeniable fact. "Poor man," she exclaimed, shaking her head, "can't you see that the devil is tempting you?" The argument was crushing and reduced the savant to silence.

The fourth axiom of logic, that of sufficient reason, substitutes that aspect of the process of identification which leads to the formulation of a law for that which creates a concept. Leibniz, who formulated it, perceived well the importance of Newton's idea of force for uniting what was separated by Descartes — thought and extension — and, perhaps less consciously, formulated his logical axiom also by an extension of Newton's law. He felt that a new logic must result from the Copernico-Newtonian reconstruction of the world.

We may consider this axiom as a tie between the biological and the suprabiological points of view; between the necessity of lawful behavior for executing our purposes and the freedom of choosing our aims and creating our ideals. It may be said that the idea of a law saves us from the anarchy of absolute indeterminism without putting us into the chains of primitive fatalism. It unites just those elements which need to be united, the antecedent and the consequent, leaving free access of the will to the antecedent and thus leaving room for human initiative.

Let us now take up another much discussed question of logic: What are the axioms? They cannot possibly be laws of thought, as they are usually called, because if they were we could commit no errors. A law acts with irresistible necessity, leaving no room for choice. Are they, then, laws of reality? But how could we construct such laws *a priori*? They cannot be mere conventions, for then they would not have the traits of universality and necessity. They are instruments for the construction of reality, shaped during a long history of gradual adaptation just as our logically ordered, sensible world was constructed without the help of discourse. This work of construction favored the development of discursive thinking. If non-contradiction is a law of reality, the reason is that we constructed the reality by excluding contradiction. That is why all the axioms have two aspects, the logical and the metaphysical.

The aim of philosophy is to construct a reality which would conform not only to our instruments for acting upon it but also to the supreme ends of our existence; a reality from which we should have excluded everything which contradicts our most noble aspirations; a reality which, not being fantastic and absolutely plastic like that of the idealistic philosophers, would nevertheless offer no insurmountable obstacles to the continuous amelioration of human life through the realization of the ideals of justice and happiness, which are in flagrant contradiction with physico-mechanical and biological points of view. Philosophy has to construct this reality, not by the method of reverie or myth, by a single stroke of thought like the achievement of a magician, but by the method which science applies, namely, slow and painful construction, gradual adaptation of the two types of thought, contemplative and active, to each other. Thus it creates on a common basis ideas equally fit to serve as a foundation for meeting the needs of our biological and suprabiological nature. Philosophical truth will then be a working hypothesis.

We see that there are two ways of constructing reality, that of interpretation, which is a purely interior act of our thought, and that of action, in which thinking forms only one link connecting sensible phenomena as they are with that other which we intend to substitute for it by another sort of creation, that of doing. The direction of this external activity belongs to thought. Its aims are given by our aspirations, the means by knowledge. The somewhat dreamy kind of construction which changes only the discursive connections among the elements of sensibility, so dear to philosophers, is given up and for it is substituted the method of a direct transformation of the "given reality" by work and struggle. This is the profound meaning of the beautiful word coined by George Eliot and reintroduced by William James, namely, meliorism. This expresses what ought to be the aim of philosophy.

THE NOTION OF INTELLIGIBILITY IN SCIENTIFIC THOUGHT

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I

THERE has been a remarkable change of attitude in recent discussions on the meaning of scientific thought. Interest is no longer centered upon the rôle and nature of particular conceptions in isolation, nor even on the general character of conceptions as such. What is rather being attempted is inquiry into the broad structure of scientific thought as a whole, viewed in relation to the intellectual and emotional background in which it arises in the life of man.

It is probable that one underlying cause of this change is the orientation of modern physics in the direction of abstract and comprehensive theories. Such developments direct attention to groups of theories rather than to particular conceptions; and as they usually involve the sacrifice of some assumptions, or their reduction to dependence on others, they tend to throw into relief the relation between bodies of theory and their underlying assumptions. In short, philosophers of science, too, have been encouraged to generalize their results. The familiar critical accounts of the place of hypotheses in the scientific process are giving place to attempts at rendering more explicit the fundamental and often unconsciously held generalizations which lie behind our very "ideals of explanation" themselves, and mould the form of scientific theory.

Many modern writers illustrate this tendency; but I must content myself here with a bare reference to the work of Émile Myerson and A. N. Whitehead. The latter has stated, in his remarkable Lowell Lectures, the general standpoint of those who undertake such studies. He points out that, when you are criticizing the philosophy of an epoch (and the same is true of its science), you must not chiefly direct your attention to those intellectual positions which its exponents feel it necessary to defend. "There will," he says, "be some fundamental assumptions which adherents of all the variant systems within the epoch unconsciously presuppose. Such assumptions appear so obvious that people do not know what they are assuming because no other way of putting things has ever occurred to them."[1] The importance of this to the student of the philosophy of science has recently been stressed by Prof. Leonard J. Russell, who has traced in detail the influence of those wide preliminary generalizations which guide and condition investigation without being in any formal sense the natural outcome of the facts themselves. It has long been recognized that in narrower fields of scientific work, there is often, in Galileo's apt phrase, "a rape of reason upon the senses." But what Russell has specially in mind is the more pervasive and unobtrusive background of guiding ideas which are "so wide in their scope, so general in their nature, so tenaciously held in the face of contrary evidence, that they seem to express something in man's attitude to the facts rather than to express the mere facts themselves."[2] To these anticipatory but challenging generalizations he gives the names of "demands." Some of these demands are logical, as that for consistency; some aesthetic, such as the demand for simplicity. But the one with which we are concerned in this paper is the demand that nature should be intelligible.

II

It is obvious that this demand for intelligibility is involved very early in the history of science: as soon, in fact, as we pass from observation of particular events to attempts at grouping them into systematic order by means of hypotheses, however vaguely these may be expressed. "With the construction of theories science enters on a new phase in its development, and serves a different set of human values. Its facts, the product of local curiosities, now take on an order, and serve the desire for comprehension. . . . The desire for knowledge becomes transferred into the desire for *significant* knowledge — significant primarily for contemplation and secondarily for practice."[3] This desire for comprehension would clearly be doomed to frustration if the world were not intelligible. Scientific thought is therefore built on "the inexpugnable belief that every detailed occurrence can be correlated with its antecedents in a perfectly definite manner exemplifying general principles." These are the words of Prof. Whitehead who insists further that, but for this belief, the incredible labors of scientists would be without hope. "It is this instinctive conviction," he says, "vividly poised before the imagination, which is the motive power of research: that there is a secret, a secret which can be unveiled."[4] The final phrase is important. The notion of intelligibility implies not only that there is a secret, but also that it can ultimately be revealed. The idea of an "order of nature" must be very old: its origins are lost in the dim beginnings of man's rational awakening.

But it has not always been further supposed that such an order can be attained by reasoned steps. Santayana has pointed out, for instance, that Goethe's *Faust* is based on the assumption that nature is fundamentally inscrutable. "She is not all open to eventual inspection; she is no mere mechanism of minute parts and statable laws. Our last view of her, like our first glimpse, must be interpreted; from the sum of her manifestations we must divine her soul. Therefore only a practical and rhetorical art, like magic, has any chance of unveiling her, and of bringing us face to face with the truth."[5] Hence Faust turned from the sciences to magic, just as others in our day turn to different arts as the prime revealers of nature's basic essence. Science, on this view, does not so much reveal the order of nature as bestow one upon her. Experience, to quote Santayana again, is turned into "so many reviewed events, the passage of so much substance through so many forms." This phrasing has a familiar ring. It is reminiscent of Myerson's view that the development of science rests on a deep-rooted conviction of the human reason that a rational explanation of phenomena has been reached when apparent differences have been reduced to a real identity. Or again, we are reminded of Eddington's conclusion from the reduction of many of the laws of physical science to identifications of substance: namely, that man filters out matter (and presumably other forms of substance) from the meaningless jumble of qualities "as the prism filters out the colours of the rainbow from the chaotic pulsations of white light."[6]

Two separate questions are clearly involved, then, in the scientist's belief in the intelligibility of nature. He assumes, first, that there is a consistent inter-relatedness of its parts; that there is, in fact, a structure: and, secondly, that science is competent to reveal that structure without distortion. It will be convenient to deal with these two aspects of our problem separately.

III

The first aspect was stressed by Prof. T. P. Nunn in his book *The Aim and Achievements of Scientific Method*, published in 1907. For him, science is one of several possible alternative processes by means of which what he calls "primary facts" are rendered intelligible. And he explains that when he says a thing is intelligible he means that it "forms an element in a *system* of terms in relation."[7] What distinguishes the scientific process from other modes of rendering the objective intelligible is, according to him, the presence of no motive except the desire to render it intelligible. In short, the process is disinterested, or, in the words of Mr. Bertrand Russell, "ethically neutral." The assumption throughout is, however, that there is a structure which the process reveals. Broad puts this assumption in other words when he says that the proposition that the world is intelligible involves, amongst other things, the proposition that the world obeys the laws of logic.[8] He adds that this is all the pure mathematician requires, but that it is not sufficient for the natural scientist. Consideration of the further postulates involved in the notion of intelligibility as used in the natural sciences brings us at once to the second aspect of our problem.

We have stated this second "demand" implied in the notion of intelligibility as the belief that science is competent (a) to reveal the structure of nature, and (b) to do so without distortion. Now (a) is clearly a more fundamental requirement than (b): for the conditions necessary to attempts at discovery of the order of nature must be satisfied antecedently to any hope of *successful* discovery. Moreover, those preliminary conditions might exist without our being able to make use of them to reveal the truth without "distortion." In (b) is involved the whole question of the objectivity of science. I have, elsewhere,[9] put forward reasons for believing that the order of nature revealed in the sciences is objective, in spite of the all-pervading selectiveness of scientific work. I shall not, therefore, pursue this further here, but shall turn to the problems involved in (a): namely, What are the conditions without which all the attempts of natural scientists to discover the order of nature would be foredoomed to failure?

IV

Broad has stated, in his *Mind and its Place in Nature*,[10] three further necessary postulates. It would probably be possible to analyze out others; but I shall confine myself to the consideration of these three.

The first is that the laws of nature must be neither too numerous nor too complex. This postulate is clearly related to the aesthetic demand for simplicity. It is true that this seems at first sight to lead us perilously near to the kind of argument used for retaining the circular path of the planets: namely that the circle is the perfect figure. Indeed men of science have sometimes put the case in a form which is no less objectionable for being less obvious — as when Schuster remarked that "the strongest of our scientific instincts is our belief in the simplicity of nature." We must not assume simplicity; though we must recognize that, *if* natural laws were too complicated, their discovery would be impracticable. There is no inconsistency in accepting Fresnel's famous saying that there is no *a priori* reason to suppose that Nature takes any account of analytical difficulties; and, at the same time, making full use of such working principles as Mach's Principle of Economy and Occam's razor whose objective effectiveness depends on the truth of this first postulate. Explicit recognition of the need for this character of simplicity in natural laws, if such are to be discoverable, has an important consequence. It reveals limitations. It enables us to envisage the possibility that science may only emerge in certain restricted regions of space. Eddington has described the astounding chaos, the hurly-burly of fragmentary electrons and protons, in the high temperature interior of a star. He has insisted that these chaotic conditions must not be regarded as abnormal: on the contrary it is the normal condition (in the statistical sense) of the greater part of the material universe. Our special conditions on this planet, which must seem like the still orderliness of death in relation to the normal chaos, may be the only ones where natural laws are simple enough for intelligible description.

The second postulate required by natural science is that it must be possible to isolate one phenomenon from all the rest, at least to one degree of approximation. The importance of this is that, if this character of nature were absent, all forms of abstraction, and in consequence all forms of science, would be impossible. The part played, and played increasingly, in the sciences by abstraction has never been so fully understood as in our own day: and we owe the first advances in these studies since Greek thought to the genius of Prof. Whitehead. I can add nothing to his account. But here, as with the first postulate, explicit recognition throws light on the limits of science. For the final and characteristic result of scientific investigation based on abstraction is the production of equations. But there may be what Clerk Maxwell called "singular points" where the equations break down. Such singular points are where influences which are usually (to some degree of approximation) negligible assume a dominating importance. If there were many singular points our sciences would become chaotic. It does not follow that such disharmonies might not ultimately be resolved. Indeed, as Maxwell recognized, singular points are sometimes points of growth. They may be the rough edges of the building, showing where the next construction is to be. Whether it is to be growth or failure, however, can only be empirically determined: but it needed the humble-mindedness of a Maxwell to see, in the optimistic nineteenth century, the theoretical importance of these signs of possible limits to scientific advance.

The third of the series of postulates is that our sensations must come to us in such an order as to reveal the laws really present. The possibility of other orders in our sensations has best been brought out, I think, in Mr. Norman Campbell's book, *Physics: The Elements*, where he makes it clear how great a part in the setting in fruitful order of our sensory observations is played by comparison with other observers. Poincaré, too, has some beautiful illustrations of the manner in which our world view would be modified by alternative sensory orders in his chapters on non-Euclidean geometries in *La Science et l'Hypothèse.* I shall not develop this postulate further, but refer only to one point: namely, that the need for this postulate discloses the possibility that just as there may be chaotic regions in space, so also there may be regions in time where science is impossible.

V

I will conclude this brief sketch of what is implied in the notion of intelligibility in scientific thought by referring back to what was said at the beginning about the tendency towards more generalized forms of scientific philosophizing.

Modern science is taking more and more abstract forms. For full grasp of its vast operations one must stand away from the process and view it as a whole. Further, as addition is made to the superstructure of science, it is increasingly necessary to pay attention to the foundations on which it rests. That is why our philosophizing on science must, within the limits of our powers, be made both wider and deeper.

[1] A. N. Whitehead, *Science and the Modern World*, 1926, p. 71.

[2] L. J. Russell, "Science and Philosophy," *Proceedings of the Aristotelian Society*, N. S. Vol. XXV, 1924–25, p. 66.

[3] J. W. N. Sullivan, *Aspects of Science*, 1923, p. 11.

[4] A. N. Whitehead, *loc. cit.*, p. 17.

[5] G. Santayana, *Three Philosophical Poets*, 1922, p. 154.

[6] A. S. Eddington, *Space, Time and Gravitation*, 1920, p. 198.

[7] T. P. Nunn, *loc. cit.*, 1907, p. 47.

[8] C. D. Broad, *The Mind and its Place in Nature*, 1925, p. 507.

[9] A. E. Heath, "Objectivity in Science," *Proceedings of the Aristotelian Society*, N. S., Vol. XXVI, 1925–26, pp. 211–224.

[10] C. D. Broad, *loc. cit.*, p. 507.

ANALYSE DE LA RELATION CAUSALE À L'AIDE DU CONCEPT D'ACTION SUFFISANTE

Karel Vorovka

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LA critique phénoméniste de la relation causale a fini par déclarer celle-ci inutile. Ernest Mach a parlé ironiquement de la conception "pharmacologique" de la causalité: "Après une dose de cause vient une dose d'effet," — Eh bien, nous voudrions tenter une adaptation de ce concept vulgaire aux besoins de la méthodologie des sciences expérimentales.

Dans les équations de la physique mathématique, on ne peut par aucun artifice attribuer le rôle de cause plutôt à un terme qu'à un autre. Les équations n'expriment ni les causes ni les effets; elles constatent les lois naturelles, c'est-à-dire les conditions auxquelles les phénomènes doivent se plier. Nous accordons donc à Mach que les lois de la physique dans leurs énoncés mathématiques n'admettent aucune interprétation causale. Mais par contre, nous affirmons que les relations causales sont nécessairement impliquées dans les recherches expérimentales qui nous mènent à la découverte des lois et dans lesquelles notre activité joue un rôle extrêmement important. Sans nos interventions incessantes au cours des phénomènes, nous ne parviendrions même pas à distinguer la réalité de l'illusion. La science vise à ce qui est invariant par rapport à notre volonté, mais par cela même elle doit rester toujours dans une connexion très intime avec notre activité. Le concept "pharmacologique" de la cause a son origine et son champ d'application primitif dans nos actions en tant qu'humaines. S'il doit être transporté de ce domaine qui lui est propre dans celui des sciences expérimentales, il faut regarder nos actions du dehors, faire abstraction de leur contenu psychologique et les traiter du point de vue exclusivement physique. Or de ce point de vue — abstrait par dessein mais point du tout matérialiste — les hommes ne sont que des systèmes matériels relativement indépendants les uns des autres, évoluant d'après leurs lois internes très compliquées; ces systèmes se troublent les uns les autres par les actions très fréquentes, dans lesquelles on peut, dans la plupart des cas, distinguer aisément le système actif du système passif.

Les lois physiques expriment les nécessités internes de systèmes fictifs très simples isolés par la pensée de tous les autres systèmes.

Si l'on pouvait considérer l'Univers comme un système unique évoluant selon une loi infiniment compliquée, dans ce cas imaginaire, l'esprit surhumain pourrait écrire une formule du monde, et il n'aurait pas besoin de nos concepts de cause et d'effet. Mais au moins pour nous, hommes, le monde est une pluralité de systèmes évoluant d'après leurs lois spéciales et échangeant sans cesse leurs actions. La marche régulière des systèmes est troublée par l'intervention des autres systèmes. Le principe de l'action et de la réaction n'est plus applicable parce que, dans la plupart des cas, le rôle de l'action ne consistera pas dans le transport de l'énergie d'un système à un autre système. Si nous pressons le bouton de la sonnerie électrique, la réaction du ressort est égale à la pression de notre doigt, mais ce n'est pas là le véritable effet provoqué par notre action. Le système formé par la sonnerie électrique avec la batterie passe d'un état d'équilibre à un état d'oscillation en dépensant une partie de l'énergie qui y était accumulée. Les cas les plus intéressants où un système agit sur un autre, sont ceux qui amorcent la transformation de l'énergie accumulée dans un système ou ceux qui dirigent les transformations dans une autre voie. D'infimes actions peuvent dégager ou arrêter les plus grandes quantités d'énergie. Dans les phénomènes de la catalyse, on peut nettement discerner le système actif du système passif subissant son influence. Du point de vue abstrait, l'ingéniosité de l'homme représente un principe catalysateur, le plus puissant du monde terrestre.

Nous avons déjà remarqué que le monde matériel est divisé en systèmes relativement indépendants. Cette division nous est imposée et nous ne pouvons la faire à notre gré. Il est vrai qu'il s'agit des concepts essentiellement relatifs du tout et de la partie. Mais pratiquement, il est facile à décider quand un homme, par exemple, doit être considéré comme un tout, comme un individu indépendant, ou comme une partie d'un tout plus grand (la famille, la nation, etc.). En physique; c'est beaucoup plus facile encore qu'en sociologie. Si nous entreprenons l'analyse des actions qui ont leur origine dans les systèmes matériels animés ou inanimés, il faut avant tout constater que les actions ont une dimension temporelle et qu'elles diffèrent à plusieurs égards, des simples évènements. Prenons notre point de départ dans les actions humaines, dont l'étendue temporelle est évidente. Les actions humaines se distinguent des simples évènements par les fins que nous poursuivons en les exécutant. Mais le concept de l'action téléologique ne peut pas être transporté dans le domaine de la physique pure, d'où il est banni depuis Galilée. Il faut donc déterminer le concept de l'action, de telle manière qu'il n'implique plus la finalité, mais qu'il reste en relation avec le concept de l'effet produit par l'action. Comment le faire? Soit l'exemple suivant. Je pose mon doigt sur le bouton de la sonnerie électrique et j'agis sur ce bouton en exerçant une pression. Mais la force déployée ne suffit pas à réaliser le contact, et la sonnerie ne fonctionne pas. Relativement au système électrique, mon action était donc nulle. On pourrait multiplier les exemples pour justifier la formation des deux concepts corrélatifs dont nous n'essaierons pas de donner de définitions explicites: d'une part, le concept de l'*action suffisante*, d'autre part, celui de l'*effet achevé*. Ces deux concepts sont manifestement relatifs. La même action qui ne suffisait pas à produire la sonnerie, a pu réaliser la tension passagère du ressort. De là une objection: ces concepts si relatifs laisseront à notre interprétation des phénomènes une liberté absolue. Au lieu d'un monde matériel disposé dans un espace à trois dimensions, on envisage un monde multidimensionnel des actions. Le monde matériel se divise de lui-même en parties relativement indépendantes, le monde des actions au contraire, ne nous donne aucune indication qui nous permettrait de les diviser en « doses » bien distinctes. Mais c'est ce que nous nous proposons de faire en introduisant le concept d'action suffisante. Ce « dosage » des actions, tel que nous l'envisageons, ne sera-t-il pas entièrement arbitraire?

Deux brèves remarques suffiront sans doute pour montrer que le « dosage » des actions est légitime.

En premier lieu, nous pouvons constater qu'un changement, même lorsqu'il a lieu d'une manière continue, n'exclut pas les conventions très naturelles conformément auxquelles nous le divisons en époques consécutives. On pourrait, par exemple, diviser un processus périodique en ses phases.

En second lieu, il suffit de se rappeler que la nature n'évolue pas d'une manière exclusivement continue. Les discontinuités si fréquentes de la nature concernent également la division de la matière dans l'espace, comme la division des événements dans le temps. On trouve des faits à l'appui de cette idée dans les phénomènes de rupture ou d'explosion, et dans tous les phénomènes d'amorcement, où l'action doit atteindre une certaine limite pour donner naissance à un événement nouveau. Le dosage conceptuel des actions ne sera donc pas entièrement arbitraire, puisque la nature elle-même le pratique. Une *action suffisante* pourra donc être toujours définie d'une façon relative, mais bien déterminée. Dans des cas très simples, il sera même possible de donner de l'action suffisante une expression mathématique qui aura la forme d'une intégrale simple ou multiple, où le temps sera toujours compris comme l'une des variables d'après lesquelles se fera la somme.

L'analyse qui vient d'être esquissée, nous révèle que le commencement de l'action précèdera toujours l'accomplissement de l'effet. L'effet ne commencera à se dérouler que lorsque l'action aura atteint un certain degré, au cours d'un intervalle de temps. Nous trouvons donc dans la relation de l'action suffisante à l'effet achevé, cette succession temporelle postulée par la conception vulgaire de la relation causale.

Le mot « *cause* » a un sens beaucoup plus large que celui d'action. La cause conçue comme une action pourvue d'une certaine dimension temporelle, apporte un peu plus de précision au concept de la *cause efficiente*. On peut à bon droit appliquer le concept de l'action suffisante partout où un système matériel animé ou inanimé, sans subir une modification profonde, amorce dans un autre système un changement radical. Dans la vie quotidienne comme dans les laboratoires des physiciens, on emploie sans cesse des règles dont la forme commune est la suivante: si un changement déterminé dans certaines conditions doit être accompli, il faut et il suffit qu'un autre changement bien défini le précède. Si, par exemple, un certain objet posé sur la table, doit être renversé, il faut et il suffit que son centre de gravité passe au-delà de certains contours. Des règles de ce genre qu'on pourrait appeler aussi lois, jouent dans nos prévisions un rôle extrêmement important. Ces règles ou ces lois méritent d'être appelées lois causales. Leur forme générale répond presque exactement à la seconde analogie de Kant; « Tout changement présuppose quelque chose à quoi il suit en vertu d'une règle.» C'est ainsi que Kant énonce le principe de causalité. Nous pouvons après notre analyse donner de ce principe un énoncé qui serait peut-être plus approprié aux buts de toutes les sciences expérimentales. Le voici: « Si le cours régulier d'un système matériel subit un changement, ce changement est dû à l'action antérieure d'un autre système, action à laquelle il suit en vertu d'une règle.» — Cet énoncé présente-t-il quelques avantages? Nous croyons que oui. Il met en évidence plusieurs hypothèses de provenance empirique qui sont voilées dans l'énoncé de Kant. Notre énoncé nous rappelle ce fait empirique, que des actions approximativement identiques provenant de systèmes presque identiques et dirigées contre des systèmes presque identiques réalisent dans ces systèmes des changements approximativement identiques. Il nous rappelle aussi que le monde est composé d'innombrables systèmes comme les électrons, les atoms, les molécules, qui sont des copies indiscernables les uns des autres, quoiqu'ils diffèrent peut-être intérieurement par des particularités individuelles imperceptibles. Le monde contient aussi des systèmes très compliqués comme les organismes, qui se ressemblent néanmoins, si bien que les prévisions sont très souvent possibles. Si au contraire le monde était composé d'un petit nombre de systèmes compliqués, tout à fait différents les uns des autres, et si chaque système se développait selon une règle qui lui est propre d'une manière très rapide, dans de telles conditions, nous ne pourrions pas obtenir d'un même système à deux reprises différentes, une réaction suffisamment semblable, pour que nous puissions être sûrs que nous avons affaire au même système.

Ces considérations nous suggèrent la thèse suivante: le principe causal serait sans valeur si le monde des systèmes matériels à trois dimensions et le monde multidimensionnel des actions, n'étaient pas tous deux divisés en parties et en doses entre lesquelles on peut constater des ressemblances frappantes. Mais le principe causal remplace la ressemblance par une identité, et de ce côté-là, il présente un caractère aprioristique.

Le déterminisme intégral fait de l'Univers physique et psychique un seul système astronomique d'où tout concept de cause ou d'action doit être, en fin de compte, banni. La conception du déterminisme intégral et moniste est trop éloignée du monde, pluraliste donné à notre expérience. Même si nous n'étions que des systèmes matériels tout à fait semblables aux autres systèmes physiques nous aurions parfaitement le droit de dire: Nous sommes des systèmes actifs partiellement déterminés par les actions des autres systèmes, mais concourant par nos propres actions à déterminer le cours du monde.

A NEGLECTED MEANING OF PROBABILITY

C. J. Ducasse
(*Brown*)

THE thesis of this paper is that there is a meaning of probability other than the traditional ones of degree of belief and frequency of occurrence; that that neglected meaning is in fact the meaning in which common sense for the most part uses the term probability; and that, in that meaning, there is truly such a thing as the probability of an individual case. This neglected interpretation of probability, like the frequency interpretation, defines probability strictly in terms of experience (as against Mr. Keynes' *Treatise*, and in agreement with Mr. Nisbet's criticisms of it in *Mind* for Jan., 1926). But the experience to which the neglected interpretation appeals, instead of being statistical in nature, is *experimental*, i.e., it is such as reveals casual connections.

The writer has argued at length elsewhere that statistically constant sequence is no part of the true definition of causal connection; but on the contrary that causal connection, although indeed often capable of being generalized by abstraction to cover any case of a stated kind, is originally and essentially a relation between single, individual events, and is to be defined purely in terms of experimentation. On this premise, the general nature of the neglected meaning of probability will be roughly indicated if we say that it is defined in terms of what, according to the writer, causal connection truly is, and not in terms of Hume's false analysis of causation as statistically constant conjunction. It is fully admitted, of course, that there are such things as statistical uniformities, and that in terms of them one perfectly legitimate and quite familiar meaning can be given to the term probability. It is only contended here that, in addition to laws of frequency, statistically obtained, there are also laws of causation, obtained by means of experimentation and abstraction; and that one meaning of probability corresponds to the latter laws just as one does to the former.

Our analysis of probability may begin with the general remark that *probability is comparative possibility*. Therefore when an account of the more general notion of possibility has been given, we shall also have an account of probability if we but indicate how possibilities may be ordered in respect of more and less.

Turning then to possibility, we may note next that there can be no such thing as mere possibility in any realm of entities that are completely determinate both internally and externally; for instance, in the physical realm as science has commonly conceived it. For, as the writer has argued elsewhere,[1] complete determinateness involves strict determinism; so that whatever is physically actual at any time was *necessary;* and whatever is not actual at any time was *impossible* then. But now, since mere possibility is a middle ground between necessity and impossibility; and since physically there is no such middle ground, then physically there is no such thing either as mere possibility. The category of possibility, therefore, logically requires that any entities to which it is to be applied shall be incompletely determinate, whether internally, externally, or both.

Such incomplete determinateness may arise in various ways. For instance, we may arbitrarily abstract from the physical world a limited set of laws and particular facts. Then, *relatively to that set,* some things will be necessary and some impossible, but others yet, although relevant, will be left undetermined either positively or negatively. These will constitute *the possible.* Thus the term "possible," like the term "necessary," is essentially a relative term, which remains thoroughly ambiguous as to content so long as the set of assumed facts to which the possibility predicated is relative, has not been specified.

Usually, indeed, the set to which our assertions of possibility are relative is the set which our relevant existing knowledge constitutes; so that usually when we speak of something as possible without explicitly mentioning the data to which that possibility is relative, what we mean is that the relevant facts *which we know* do not render that thing causally necessary or impossible. But this reference to the knowledge that we possess is no essential part of the meaning of possibility. Any incompletely determinate set of relevant data, no matter whether the cause of their incompleteness be our ignorance, our caprice, or anything else, defines possibilities. Possibility, and therefore probability, is thus a relation which has neither more nor less to do with knowledge, ignorance, and belief, than have implication and causation. Knowledge, ignorance, and rational belief, and likewise certainty, are epistemological categories, wholly irrelevant to the logic of probability. Even if, with Mr. Keynes, we were to view probability purely in terms of propositions, what we should then have to say is that the truth of certain premises would make it, as the case might be, necessary, impossible, or possible that a certain conclusion be true. Mr. Keynes properly stresses the relational nature of probability, which forbids us to speak of a proposition as probable except in reference to specified premises. But he is wholly in error when, wishing to contrast probability with implication, he writes (*Treatise*, p. 6) that "From the premises '*a* implies *b*,' and '*a* is true,' we can conclude something about *b* — namely that *b* is true — which does not involve *a*." For in this statement what Mr. Keynes is in fact saying is that a proposition can be asserted *as a conclusion*, without involving reference to premises. And this of course is not so. Only empirical observation would enable us to say simply that "*b* is (in fact) true." If on the other hand we are not observing but concluding, then what we must say is that "*b* is (necessarily) true (if . . .)." No such contrast then exists as Mr. Keynes attempts to draw between probability and implication. With both, conclusions are strictly relative to premises; and neither has anything essential to do with knowledge and belief.

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[1] *Causation and the Types of Necessity.* University of Washington Press, 1924. Ch. VIII.

The result so far of our inquiry into the nature of the possible is this: First, nothing can meaningfully be referred to as possible, except relatively to some set of incompletely determinate data; and secondly, the possible is then that which is both relevant to such a set, and is not either necessitated or precluded by that set. Now, however, such necessitation or preclusion may be either formal, conceptual, or causal. When it is causal, we then have the particular species of possibility with which this paper is concerned. The other two species will not be considered here. Our next task must be to indicate briefly, first, the meaning in which causal connection is here taken, and second, the meaning of relevant denial of causal necessitation.

The view of causal connection on which this paper is based has elsewhere been argued in detail by the writer.[2] Lack of space here compels a purely dogmatic statement of its essential features, as follows:

1. Statistically constant sequence is no part of the definition of causation, but only, sometimes, a corollary of the presence of causation. That is, Hume's analysis of causation is wholly wrong. It confuses the two distinct notions of cause and law.

2. The true definition of cause is to be framed not in statistical but in experimental terms, and it is roughly as follows: The cause of any given individual event was such other individual event as

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[2] *Op. cit.* and also "On the nature and the observability of the causal relation" *Jour. of Philos.*, Feb. 4, 1926.

alone occurred in the immediate environment immediately before. The occurrence of such a single change in a given environment constitutes the essence of experiment. (By an event is meant the change or the persistence of a state of an object. Objects are thus implied. Changes only are considered here.)

3. This definition of cause is in terms of one single experiment, and thus it makes the causal relation primarily a relation between individual events. Moreover it reveals the causal relation as being not a 2-term, but essentially a 3-term relation, its three terms being the cause-event, the effect-event, and thirdly the environment of which the cause-event was the sole modification.

4. Although causation is primarily a relation between individual events, nevertheless, when likenesses exist between a number of individual causes, between their individual effects, and between the individual environments in which they occurred, a generalization can then be formulated concerning causes of a kind and effects of a kind in environments of a kind. Such a generalization is a causal law — a law because general, and causal because concerning facts that are, each individually and separately, facts of causation. A causal law, it should be noted, thus never declares a causal connection between *kinds* of cases, but only and always between *cases* of kinds.

5. There are then three distinct operations involved in the obtaining of a causal generalization, namely:

(a). The *observing* of concrete individual causal facts, i.e., of facts such as constitute the elements of experiments, whether artificially contrived or natural.

(b). The discerning and describing, i.e., the *abstracting* of the likenesses between the respective elements of two or more such experiments.

(c). The *extending* of the resulting abstract causal proposition to any new case of like elements (generalizing).

6. A causal generalization will then assert that any event of a kind C which constitutes the only modification of an environment of a kind E, will cause, i.e., will *necessitate* the immediate and contiguous occurrence of, an event of a kind K.

Returning now to the characterization of possibility in terms of causation, we may note, first, that a set of data relative to which the occurrence of an event of kind K would be causally *necessary*, would consist, for instance, of a causal generalization to the effect that any case of C in environment E causes a case of K; and, in addition, of an existential datum to the effect that a case of C in environment E does exist.

But if, on the contrary, the set given is *not* such a necessitating set, then the occurrence of *K* will be *only possible* relatively to it. However, the assertion that *K* is only possible will be significant *only if the denial that the set given necessitates* K *is a relevant denial.* And it will be a relevant denial only if the set given can be truly described as a greater or less departure from or approximation to the set relative to which the occurrence of *K* would have been necessary. This will be the case, for instance, if the existential datum is to the effect, not that a true case of *C* exists, but only that something *more or less like* C exists; or again, if the environment given as present is only *more or less like* E; or again, if the sweep of the causal generalization given only more or less approximates the sweep of that of the necessitating set. These three ways in which a set may fall short of being a necessitating set indicate more precisely what it means to speak of a set as being "incompletely determinate." It means that it is viewed not in itself, but essentially as an approximation to a necessitating set. The statement of these three ways of approximation, we may also note, is at the same time a statement of the ways in which causal possibilities can be ordered in respect of magnitude. That is, it furnishes the desired bridge from possibility to probability.

In conclusion, it may be remarked that the foregoing analysis of causal possibility gives a clear account of the meaning of the common assertion that a person *can do* this or that thing. Such an assertion means that the person's will to do the thing is the only remaining difference between the actually existing state of affairs, and the state that would causally necessitate the occurrence of the deed.

NOTATIONAL RELATIVITY

Henry M. Sheffer
(*Harvard*)

THE Theory of Knowledge is ordinarily concerned with the analysis of the Knower, the Knowing, and the Known. The Knowing is taken in the psychological sense of "the *act* of knowing." There is imperative need, however, for an analysis of the Knowing in a purely logical sense, namely, in the sense of "the *medium* for knowing." The medium for knowing consists of *symbols* — visual, auditory, tactual, and so on, or any combination of these. In this paper we limit our attention to the commonest type of symbol, viz., the visual — for example, written or printed symbols, including of course "words." Let us speak of such symbols as *notations*.

Any notational deductive system consists of a set of propositions all of which are deducible from, and are thus "represented by," a finite set of propositions, called "postulates," which are logical constructs of certain logical variables — namely, of one or more *class* variables and one or more *relational* variables. In the simplest case there are two logical variables — a class variable K, and a relational variable R. Throughout this paper we limit the discussion to this simplest case. A "postulate set" for such a deductive system is thus a (usually highly complex) construct of (K, R), which we may represent by $\lambda\,(K, R)$. Now let $\lambda\,(K, R)$ and $\lambda'(K', R')$ be any postulate sets respectively on any "bases" (K, R) and (K', R'). It may happen that the two deductive systems thus determined are "equivalent" — i.e., that the respective class variables and relational variables are intertranslatable and the respective propositional forms are interdeducible. This is the case, for example, with a number of well-known postulate sets for geometry. It seems natural to inquire whether there exist types of logical constructs more general than those employed in present-day postulate theory, constructs that might express certain logical "invariants" of the usual postulate sets, in virtue of which invariants such postulate sets are equivalent. It is the purpose of this paper to point out a few of such constructional generalizations.

The current postulational theory of notational deductive systems derives most of its power from the fact that it has generalized the notion of proposition to propositional form, of class to class variable, of relation to relational variable, and consequently of system to system form. May not these structural generalizations be extended much further? . . . If we consider a propositional form like "$Rxyz$ holds" as stating that "$Rxyz$" has "positive validation," and a propositional form like "$Rxyz$ fails" as stating that "$Rxyz$" has "negative validation," we realize that "holding" and "failing" may be regarded as the two values of a new logical variable, namely, of a "validational variable," which we shall represent by α. Henceforth it becomes possible to replace forms like "$Rxyz$ holds" and "$Rxyz$ fails" by the more general construct "$Rxyz\alpha$," which may be read "$Rxyz$ has validation α."

The notion of validational variable enables us to determine system forms with a high degree of generality. But the generalizations which result from the introduction of this type of variable are still limited in scope. A more powerful concept is the following. Let $\lambda(K, R)$ be any postulate set on any base (K, R). Let τ be any *permutation* imposed on the K-elements of this system form. Let $\lambda_\tau(K, R)$ represent what $\lambda(K, R)$ becomes after each K-element x is replaced by the K-element x_τ as determined by permutation τ. Then τ either leaves *all* the R-validations invariant, or else it changes at least one of them. Let us assume that it leaves all the R-validations invariant. Let T be the class of all those and only those permutations τ that leave all the R-validations invariant. Then we call T the *tropicity* of $\lambda(K, R)$. Now let $\lambda'(K, R')$ be any postulate set on the same class variable K and on any relational variable R', and let T' be the tropicity of $\lambda'(K, R')$. If $T = T'$, then $\lambda(K, R)$ and $\lambda'(K, R')$ will be said to have the same tropicity, or, to be *syntropic*. The Theory of Tropicity is concerned with the analysis of the various permutational types which are possible for a given K. Instead, therefore, of determining a system form in the conventional way, i.e., by an ordinary postulate set on (K, R), we may now determine a system form by merely specifying the tropicity of the given K. Any two postulate sets whatsoever which have this tropicity will be found to be equivalent — i.e., intertranslatable as to their relational variables and interdeducible as to their propositional forms. Hence, syntropicity is a *sufficient* invariant to insure equivalence.

Syntropicity, however, is not a *necessary* condition for equivalence. This is shown by the following further generalization. Let K be any class variable, and let H be a relational variable having the specific property that: any analytic statement in terms of (K, H) that holds for any K-subclass holds also for any other K-subclass of the same number of elements; in other words, if λ is any logical construct on (K, H), and if σ and σ' are any cocardinal K-subclasses, then $\lambda(\sigma)$ implies $\lambda(\sigma')$. In terms of any relational variable of this type it is impossible to distinguish analytically any K-element from any other K-element, any K-dyad from any other K-dyad . . . , any K-*m*ad from any other K-*m*ad. Such a relation we shall call "homalic" (after the analogy of homaloidal space). Homalic relations may be of any degree — dyadic, triadic, tetradic . . . , polyadic. If, for example, we impose on any K a triadic homalic H, we obtain the following analytic determination:

For any K there is at least one triadic H and at least one set $(\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5)$, such that:

for any K-element a , ... 1. $Haaa\alpha_1$
for any distinct K-elements a, b, ... 2. $Haab\alpha_2$
3. $Haba\alpha_3$
4. $Habb\alpha_4$
for any distinct K-elements a, b, c, ... 5. $Habc\alpha_5$

Since each of the five α's may be specified as "holds" or as "fails," independently of any other α, there are exactly thirty-two triadic homalic system forms.

From the above determination, which validates all the n^3 ordered K-triads (if the number of K-elements is n), we obtain the following *theorem* which validates only n^2 of these triads:

For any K having at least one element, and for any triadic homalic H, there is at least one set $(\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5)$ and at least one K-element $\bar{a}$, such that:

1. $H\bar{a}\bar{a}\bar{a}\alpha_1$
for any K-element b, distinct from $\bar{a}$, ... 2. $H\bar{a}\bar{a}b\alpha_2$
3. $H\bar{a}b\bar{a}\alpha_3$
4. $H\bar{a}bb\alpha_4$
for an K-elements b, c, distinct from each other and from $\bar{a}$, .. 5. $H\bar{a}bc\alpha_5$

This set of n^2 validated ordered K-triads we shall call the first *straticity* of the given system form, and we shall call $\bar{a}$ a *stratic* element. We now introduce the following analytic shorthand, which we shall refer to as the "stratic abbreviation."

For any K-elements x, y, we write $H'xy$ in place of $H\bar{a}xy$. With this abbreviation, we obtain the *theorem:*

For any K having at least one element, and for any triadic homalic H, there is at least one set $(\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5)$ and at least one K-element $\bar{a}$, such that:

1. $H'\bar{a}\bar{a}\alpha_1$
for any K-element b, distinct from $\bar{a}$, ... 2. $H'\bar{a}b\alpha_2$
3. $H'b\bar{a}\alpha_3$
4. $H'bb\alpha_4$
for any K-elements b, c. distinct from each other and from $\bar{a}$, . $H'bc\alpha$ 5. $_5$

If we now specify the α's in all the thirty-two possible ways, we obtain different analytic results according as

(1) it is true that $[\alpha_1 = \alpha_4$ and $\alpha_2 = \alpha_3 = \alpha_5]$, or,
(2) it is false that $[\alpha_1 = \alpha_4$ and $\alpha_2 = \alpha_3 = \alpha_5]$.

In case (1) we have dyadic homalicities. In case (2) the stratic element $\bar{a}$ which, to begin with, was any "arbitrary" K-element, now becomes a "unique" element, with a unique analytic property. This "uniqueness," however, is due ultimately to what may be termed a "notational illusion." In a similar manner we discover that every case of "unique" dyads, triads . . . , polyads of K-elements may be obtained in the following uniform manner, namely, by: (a) the imposition, on a given K, of a homalic H of a sufficiently high degree; (b) the determination, on this homalic H, of a straticity with a sufficient number of stratic elements; and, finally, (c) the introduction of the stratic abbreviation, which replaces $H\bar{a}xyz$ . . . by $H'xyz$ . . . , $H\bar{a}\bar{b}xyz$ . . . by $H''xyz$ . . . , $H\bar{a}\bar{b}\bar{c}xyz$ . . . by $H'''xyz$ . . . , and analogously for higher straticities. From this it may be proved that every possible relational structure, and every possible system form, can be generated by the above-mentioned procedure *via* homalicity, straticity, and the stratic abbreviation. Hence, instead of determining a system form by the method of assigning the tropicity of the given K, we may now determine the system form with a far greater degree of generality by merely specifying the number of stratic elements involved, i.e., by specifying the straticity of K. And any two postulate sets whatsoever which have this straticity will be found to be equivalent.

The Theory of Tropicity may be considered as a special theory of Notational Relativity. Just as, in the special theory of physical relativity, any two space-time reference-systems which satisfy a certain space-time invariant are relativized, so, in the theory of tropicity, the propositions of any deductive science are invariant in form for any syntropic "transformation" of any relational "coordinates." Thus any two relational "reference-systems" which are syntropic are relativized. Similarly, the Theory of Straticity may be looked upon as a general theory of Notational Relativity. For, in this theory, the propositions of any deductive science are invariant in form for any synstratic "transformation" of relational "coördinates." Hence, any two relational "reference-systems" which are synstratic are relativized.

In short, by the method of homalicity, straticity, and stratic abbreviation we obtain the complete relativization of all relations.

Division C

THEORY OF VALUES

Ethics, Social Philosophy, Aesthetics

1. GENERAL SESSION

Time:	Thursday, September 16, 8.00 P.M.
Place:	New Lecture Hall
Subject:	Philosophy and International Relations
Chairmen:	James H. Tufts, Chicago Wilbur M. Urban, Dartmouth

At the opening of the session it was announced that word had been received of the death of Professor Rudolf Eucken. After appropriate remarks by Professor Urban, the members of the Congress stood in silent tribute to the memory of the departed colleague.

L'ORIENTATION DE LA PHILOSOPHIE ET LA PRÉPARATION DE LA PAIX

C. Bouglé
(*Sorbonne*)

Il y a bien des définitions de la philosophie. Et choisir l'une d'entre elles on pourrait presque dire que c'est déjà opter entre les systèmes. Il semble pourtant que pratiquement, l'accord puisse se faire sur une caractéristique générale: et c'est précisément que tout philosophe tend à une systématisation du savoir humain. Qu'il s'efforce de synthétiser les résultats des sciences spéciales, ou seulement de dégager les principes qui rendent possible leur constitution, ou encore de saisir la réalité que leurs constructions risquent de déformer, dans tous les cas le philosophe ne se contente pas de vérités spéciales: il garde l'ambition d'atteindre des vérités premières, essentielles, universelles.

Il est à noter que pour atteindre à cette fin le philosophe emploie une méthode délibérément critique. Il n'entend faire appel qu'à la libre réflexion personnelle. Il ne veut devoir d'adhésions qu'à des démonstrations s'adressant elles-mêmes à la raison. En ce sens toute philosophie suppose un minimum de rationalisme critique. C'est par le progrès de ce rationalisme que le mode de penser philosophique s'est différencié des autres, soumis à l'empire des sentiments ou des croyances.

Non que la philosophie ne puisse aboutir à la justification des croyances traditionelles ou à l'apologie du sentiment. Des exemples assez fameux prouvent que de nos jours encore elle peut prendre ce chemin. Mais justification des croyances ou apologies du sentiment sont pour la philosophie des points d'arrivée, non des points de départ. Même lorsqu'elle doit finir par proposer à la raison une sorte de renoncement, sinon d'abdication, elle commence par essayer de la convaincre à coups de démonstrations mises en forme intellectuelle. En ce sens toute philosophie commence, non par un acte de foi, mais par un acte de défiance à l'égard du donné historique: elle suppose un effort de libération, au moins provisoire, à l'égard de toute tradition ou impulsion d'où qu'elle vienne.

C'est dire qu'à un certain point de vue, à un certain moment de son développment, toute philosophie est par définition internationale. Sitôt née toute idée philosophique veut des ailes pour faire le tour du monde. Elle ne connaît pas de frontières nationales. En ce sens, parler de vérité française, ou allemande, ou américaine c'est une sorte de blasphème contre la philosophie. « J'écris même pour les Turcs,» disait Descartes. Mieux que personne il avait compris, il a démontré que la philosophie, c'est, pardessus les barrières de races, l'individuel tendant à l'universel.

Il serait imprudent toutefois, pour se représenter les services que la philosophie doit rendre à la cause de la paix humaine, de s'en tenir à cette appréciation de principe. En fait, nous constatons expérimentalement que la philosophie, en dépit de son ambition originelle, n'arrive guère à se détacher complètement de son milieu moral. Malgré sa tendance doublement universelle — tant du côté du sujet que du côté de l'objet — un système du monde porte presque toujours la marque du sol qui l'a vu naître. La dépendance est, de l'aveu général, beaucoup plus sensible dans l'ordre de la philosophie que dans l'ordre des sciences proprement dites. Probablement parce qu'une philosophie n'implique pas seulement un effort pour synthétiser les vérités acquises par les sciences, mathématiquement ou expérimentalement démontrables. Elle se prononce aussi sur le système des valeurs, sur les consignes et appréciations qui contrôlent la conduite des sociétés et des individus. C'est dire qu'une philosophie a bien de la peine à s'empêcher d'être la traduction d'une culture, d'un ensemble de manières de vivre et de sentir en même temps que de penser, qui commande une certaine conception de la vie. Or cette culture est elle-même liée le plus souvent à l'histoire d'une nation. Si bien que le philosophe, ce solitaire, se trouve être l'interprète, pour ne pas dire l'avocat, d'une nation devant le monde. En fait c'est souvent par les tendances de la philosophie, plus que par celles de la science, et au moins autant que par celles de son art, qu'on cherche à définir le tempérament d'une nation. On a souvent répété que Hegel et ses successeurs exprimaient l'âme allemande, comme on dit de nos jours que Masaryk et ses prédecesseurs expriment l'âme tchèque. De pareilles correspondances ne nous interdisent-elles pas de maintenir que la philosophie n'est qu'un va-et-vient entre deux pôles, l'individuel et l'universel? Elle ne peut se détacher de la zone intermédiaire qui l'alimente, et qui est le terrain national. Plus d'un penseur, prenant conscience de cette dépendance, y voit une nécessité vitale. Il déclare à ses compatriotes: « Ne cherchez d'autre conception de la vie que celle que sont des entrailles mêmes de votre histoire. Sous peine de mort morale, restez vous-même.» D'où une justification, sinon des impérialismes, au moins des individualismes nationaux, qui est loin d'être toujours favorable au rapprochement des peuples par la philosophie.

Par un autre biais d'ailleurs celle-ci pourrait menacer l'esprit de paix; elle pourrait apporter des arguments à ceux qui déclarent utopique tout effort pour empêcher les nations de s'entrebattre. Toute philosophie, disions-nous, suppose une part de rationalisme critique initial. Mais il y a bien des philosophies qui n'usent de la raison que pour l'inviter à se renoncer elle-même. Elles insistent à plaisir sur son impuissance non seulement dans l'ordre théorique, mais encore et surtout dans l'ordre pratique. La réflexion personnelle a vite fait, pensent-elles, d'abaisser l'orgueil de l'homme. La plus profonde sagesse ne serait-elle pas de laisser faire les instincts? Pour le gouvernement des sociétés, en particulier, allons-nous oublier qu'elles sont de grands organismes, immergés dans la nature, et qu'il serait téméraire pour elles de vouloir se soustraire à ces lois de l'évolution qui ont permis le perfectionnement des organismes? La lutte pour la vie est une de ces lois. Elle est la condition de la sélection. Quiconque voudrait rayer la guerre de l'histoire humaine entreprendrait donc une tâche à l'avance condamnée. On sait que dans certains pays ce « darwinisme social » a comme inhibé l'élan logique de la philosophie de la paix. Le naturalisme en tant que tel n'est pas forcément une apologie de la guerre. Car l'entr'aide aussi est dans la nature. Et il est loisible de demander, même au règne animal, des leçons de solidarité. Il n'en reste pas moins qu'en fait, dans la seconde moitié du XIX^e siècle, c'est en les renvoyant aux lois de l'évolution qu'on a découragé les sociétés de leur effort pour enrayer la guerre: le naturalisme a souvent servi de rempart intellectuel au nationalisme.

Le conclusion de ces remarques c'est que pour préparer la paix dans les esprits il ne suffit pas de laisser faire, laisser passer la philosophie telle quelle. Il importe que les tendances universalistes qu'implique, initialement, comme nous l'avons vu, tout effort de réflexion philosophique, soient secondées, renforcées, défendues, contre les tendances adverses; et spécialement contre les tentations du nationalisme et du darwinisme social, par un certain état de l'opinion, par une force collective capable de commander un progrès des institutions internationales.

La démocratie ne pourrait-elle être cette force d'appoint?

L'extension de la démocratie à la surface du globe est un fait avec lequel tout le monde doit compter. L'idéal dont elle se réclame a soutenu plus d'un peuple pendant la guerre. Depuis la guerre plus d'un peuple exige que cet idéal devienne une réalité. Le droit des peuples à disposer d'eux-mêmes, si souvent invoqué, n'implique pas seulement l'indépendance d'une nation vis-à-vis des autres, mais un contrôle de la masse sur l'État. Que dans certains pays d'Europe les difficultés mêmes de l'après-guerre aient permis un retour offensif du pouvoir personnel, cela n'empêche pas qu'au total le balance continue de pencher du côté de l'esprit démocratique. Non pas seulement à cause de la chute des rois en Europe, mais à cause de l'éveil des peuples en Orient. Dans l'ensemble les prophéties de Tocqueville, confrontant les tendances de l'histoire américaine avec celles de l'histoire française, se vérifient: l'esprit de liberté et d'égalité gagne du terrain.

Ces gains de la démocratie s'expriment-ils seulement — comme paraît le penser Lord Bryce — par ce fait que les moyens d'action des peuples sur les gouvernements sont de plus en plus nombreux? Ce n'est pas seulement par les moyens employés, mais par les fins préférées que se caractérise la démocratie. « Pour le peuple et par le peuple, » disait justement Lincoln. « Et lorsqu'on essaie de monnayer cette expression elle-même: « pour le peuple » on s'aperçoit qu'elle implique la défense des droits égaux des individus qui composent le peuple.

La démocratie suppose toujours un minimum d'individualisme, un individualisme-fin, lequel n'est pas forcément lié au libéralisme économique classique, mais peut très logiquement s'accorder avec des moyens socialistes, partout où la mise en œuvre de ceux-ci paraît nécessaire à la sauvegarde des droits de la personne humaine.

Les tendances ainsi définies sont-elles favorables à l'organisation de la paix humaine?

Il ne manque pas d'adversaires de la démocratie qui voudraient le contester. Ils font observer que les sentiments que la démocratie développe dans les masses semblent se concilier fort bien, en fait, avec les passions nationales intenses dont les guerres s'alimentent. Il y a une pointe de vérité dans cette remarque. Il est très exact, par exemple, que le patriotisme n'a point partie liée avec le loyalisme monarchique, comme on a paru le croire longtemps. Tels peuples éprouvent encore aujourd'hui le besoin d'incarner traditions et aspirations nationales en la personne d'un roi, qui lors même que toutes les autres attributions lui sont enlevées garde celle de porte-drapeau. Tels autres peuples se passent très aisément de cette personification. Et ceux-ci ne sont pas moins patriotes que ceux-là. Bien plus, qu'un peuple s'émancipe vis-à-vis de ses rois, il arrive que cela le rende, à l'égard de l'étranger plus jaloux de son indépendance. Participant plus que naguère au gouvernement de la nation, il l'en aime davantage et est disposé à la défendre avec une énergie accrue. L'expérience du XIX^e^ siècle a clairement prouvé que le sentiment démocratique et le sentiment national peuvent ainsi contracter une alliance intime.

Il n'empêche que l'étroite union du sentiment national et du sentiment démocratique permet à celui-ci de dilater en quelque sorte celui-là, de lui enlever sa pointe offensive; de le préparer aux accords nouveaux que la paix exige. La démocratie est justement ce régime dont le succès réfute par l'action le pessimisme naturaliste où les bellicistes ont si souvent pris leur meilleur point d'appui intellectuel. *La démocratie suppose une lutte méthodique de l'humanité contre la nature, un règne humain superposé au règne animal, la préférence accordée aux rapports contractuels sur les statutes traditionnels, une organisation sociale enfin mise au service du droit personnel.* C'est dire que, en prolongeant la courbe du mouvement qui a favorisé, à l'intérieur des nations, l'avènement des institutions de type démocratique, on est logiquement amené au seuil des institutions qui s'efforcent de substituer, dans les relations entre nations comme dans les relations entre individus, le débat au combat.

Il y a donc là un remède à notre portée. Contre les tentations nationalistes et naturalistes auxquelles la philosophie est exposée, l'antidote est tout trouvé: c'est le système des valeurs que la démo-

cratie défend. C'est l'esprit démocratique. Que les philosophes comprennent de mieux en mieux l'appui que peut fournir, à ce rationalisme qui est la caractéristique essentielle de leur attitude, le progrès de cet esprit. Que d'autre part ils soient de plus en plus nombreux parmi les peuples, les hommes désireux et capables de penser par eux-mêmes, d'appliquer la raison à la vie. Et les chances de la paix humaine croîtront dans le monde.

DARWINISMUS UND INTERNATIONALE BEZIEHUNGEN

Erich Becher
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MEIN Vortrag möchte eine Kritik der darwinistischen Rechtfertigung des Krieges bieten.

Wenn heute vom Kriege die Rede ist, sei es auch in abstrakt-philosophischer Betrachtung, so tritt mit psychologischer Notwendigkeit das Erlebnis des Weltkrieges, die gewaltigste und furchbarste Erfahrung unseres Lebens, in unser Bewusstsein, und mit ihr erhebt sich allzu leicht wieder der Sturm leidenschaftlicher Gefühle, der seit 1914 so viel Unheil in der Welt angerichtet hat. Solche Gefühle erschweren ungeheuer die objektive Betrachtung vieler Kriegsprobleme, an denen wir doch nicht schweigend vorübergehen dürfen, wenn wir wollen, dass Vernunft und Recht im Völkerleben mehr und mehr zur Herrschaft gelangen. Fast möchte ich Sie bitten, bei unseren Betrachtungen nie an den Weltkrieg, sondern nur an Völkerkämpfe auf dem Monde oder lieber noch auf fernen Fixsternen zu denken. Sie könnten jedoch einen solchen Wunsch wohl kaum erfüllen. Darum gestatten Sie mir die andere Bitte, von vorne herein überzeugt zu sein, dass ich durch diesen Vortrag, den ich erst vor einer Woche in Vertretung Max Scheler's übernommen habe, dem Ideale des ehrlichen Friedens dienen möchte.

Darwin's Lehre umfasst mehrere Hypothesen, unter denen die Annahme einer Entwicklung des Organismenreiches aus einfachen Anfängen als die grundlegende gelten kann. Darwin hat mit diesem Entwicklungsgedanken Hypothesen verbunden, die das Zustandekommen der Entwicklung erklären sollen. Die wichtigste von seinen Hypothesen über die Entwicklungsfaktoren ist die Lehre, dass der Kampf um's Dasein unter den Organismen eine „natürliche

Auslese“ der Best-Angepassten bewirke, die dann ihre Vorzüge vererben; diese natürliche Zuchtwahl wiederhole sich von Generation zu Generation und verursache so eine fortschreitende Anpassung und Entwicklung. Die natürliche Auslese stellt nach Darwin den wichtigisten Entwicklungsfaktor dar. Auf die übrigen von ihm angeführten Entwicklungsfaktoren brauche ich nicht einzugehen. Ferner kann hier dahingestellt bleiben, ob und inwieweit Darwin's Hypothesen berechtigt sind.

Wenn man den Gedanken der Höherentwicklung des Lebens auf die internationalen Beziehungen im Völkerleben anwenden will, so kann er vielleicht die Hoffnung erwecken, dass auch diese in aufsteigender Entwicklung fortschreiten und immer reicher, feiner, und differenzierter werden mögen, dass eine immer vollkommener sich gestaltende Anpassung der Völker und ihrer internationalen Einrichtungen stattfinden werde.

Weniger harmlos sind die Konsequenzen, die aus der für Darwin's Lehre so charakteristischen Zuchtwahlhypothese inbezug auf die internationalen Beziehungen gezogen worden sind. Wenn der mörderische Daseinskampf eine Auslese der best-angepassten Lebewesen und dadurch eine Höherentwicklung im Organismenreich bewirkt, so wird, meint man, der Krieg als Daseinskampf unter den Völkern eine Auslese der Besten unter ihnen und damit fortschreitende Entwicklung im Völkerleben hervorrufen. Er wird minderwertigen Völkern Vernichtung, höherwertigen Aufstieg und Ausbreitung bringen und dadurch die Höherentwicklung der Menschheit fördern. Demnach wäre es törichte Sentimentalität, den Krieg zu verabscheuen und zu bekämpfen.

Wir wollen, wie schon gesagt, diese darwinistische Rechtfertigung des Krieges, diesen ,,Kriegsdarwinismus,“ einer streng sachlichen Prüfung unterziehen, ohne uns von irgendwelchen Gefühlen beeinflussen zu lassen. Dabei wollen wir an diejenigen internationalen Beziehungen denken, die für uns die praktisch wichtigsten sind, nämlich an Beziehungen und Kriege zwischen modernen Kulturvölkern. Stellt uns da der Kriegsdarwinismus eine Wahrheit vor Augen, die hart und schmerzlich, aber zwingend ist, der wir also wie so mancher bitteren Wahrheit in's Auge sehen müssen? Wir dürfen, meine ich, diese Frage glücklicherweise verneinen; denn gegen den Kriegsdarwinismus sprechen die schwerwiegendsten Einwände.

Schon in der Pflanzen- und Tierwelt siegen im Daseinskampfe sehr häufig nicht die best-angepassten, sondern die vom Zufall begünstigten Individuen; der schnellste junge Hase ist verloren, wenn er dem Fuchs züfallig gerade in die Zähne hinein läuft. Ferner sind die best-angepassten nicht immer die höher entwickelten Lebewesen; z.B. kann ein reduzierter, kümmerlicher Schmarotzer-Organismus an seine Lebensweise ausgezeichnet angepasst sein. Und so kann auch nicht die Rede davon sein, dass im Kriege zwischen Kulturvölkern stets oder fast stets die höherwertigen den Sieg erringen. Grössere Kopfzahl, bessere Führung, Kriegsschulung und -ausrüstung und ähnliche Vorteile oder gar Zufälligkeiten werden bei Gleichwertigkeit der kämpfenden Völker zum Erfolg führen; ja sie können selbst einen höherwertigen Gegner zum Erliegen bringen. Die Geschichte zeigt in der Tat, dass bei wiederholten Kriegen zwischen denselben Kulturvölkern der Sieg bald dem einen, bald dem anderen verfiel. Gegen ein Volk, dessen Kriegsmacht sehr stark ist, bilden sich leicht Allianzen, die oft den Vorteil erdrückender numerischer Uebermacht haben werden.

Der Krieg zwischen Kulturvölkern bewirkt also keine zuverlässige Auslese der wertvolleren Völker. Wert, Kriegstüchtigkeit und Kriegserfolg brauchen einander durchaus nicht zu entsprechen.

Man könnte nun meinen, wenn auch Wert und Kriegserfolg der Völker nicht immer parallel gehen, so müssten sie doch im Durchschnitt einander entsprechen. Auch im Daseinskampf in der Pflanzen- und Tierwelt siegen ja nicht immer die Best-Angepassten; sie gehen oft in Folge unglücklicher Zufälligkeiten trotz ihrer Vorzüge zugrunde. Aber im Durchschnitt haben doch die best-angepassten Pflanzen und Tiere im Kampf um's Dasein am meisten Erfolg; sie werden sich daher reichlich fortpflanzen und ausbreiten, während die schlecht-angepassten mit der Zeit allesamt vernichtet werden. So mögen mit der Zeit auch die weniger wertvollen Kulturvölker durch die Kriege eliminiert, die höherwertigen zu Aufstieg und Ausbreitung geführt werden, wenn letztere auch gelegentlich einmal Niederlagen erleiden.

Man wird in der Tat anerkennen müssen, dass gewisse wertvolle Eigenschaften und Besitztümer der Kulturvölker ihre militärische Leistungsfähigkeit und ihre Aussicht auf kriegerische Erfolge erhöhen; das gilt z.B. von naturwissenschaftlicher und technischer Beanlagung und Bildung, von manchen Tugenden wie Tapferkeit und Vaterlandsliebe. Andere wertvolle Qualitäten hingegen, wie z.B. die künstlerische Beanlagung eines Volkes, haben mit Kriegstüchtigkeit und Siegesaussichten wenig oder nichts zu tun. Und es scheint sogar sehr wertvolle Qualitäten zu geben, die im Kriege einem Volke verhängnisvoll werden können; man denke an Wahrhaftigkeit, und Menschenliebe. Ohne Zweifel sind Täuschung, Lüge und Verleumdung im Kriege furchtbare Waffen, die viel zur Ueberwindung des Gegner's beitragen können; und unbarmherzige Härte führt im Völkerringen wohl eher zum Siege als Menschen- oder gar Feindesliebe. Manche höchst wertvollen Eigenschaften werden also den durchschnittlichen Kriegserfolg nicht erhöhen, sondern vermindern, während gewisse schlimme Qualitäten die Kriegsaussichten verbessern helfen. Durch Kriege werden somit schwerlich die hervorragend wahrhaftigen und menschfreundlichen Völker begünstigt, Ehrlichkeit und Feindesliebe gezüchtet.

Der Gedanke, dass den höherwertigen Kulturvölkern im Durchschnitt der Kriegserfolg zufalle, gibt aber noch zu einem anderen Bedenken Anlass. In der Pflanzen- und Tierwelt findet, wie Darwin in seiner Lehre vom Daseinskampf betont, eine verschwenderische Produktion von Individuen statt. Wenn nun auch oft vortrefflich angepasste Individuen durch ungünstige Zufälle vernichtet werden, so bedeutet dies für die Hypothese von der natürlichen Zuchtwahl keine verhängnisvolle Schwierigkeit; es werden bei der grossen Zahl der Individuen doch vorwiegend die best-angepassten den Daseinskampf bestehen und zur Fortpflanzung gelangen. Anders aber liegen die Verhältnisse bei den Kulturvölkern, da sie nur in relativ kleiner Anzahl existieren. Wird ein höchstwertiges Kulturvolk etwa in Folge zufällig ungünstiger Umstände besiegt und vernichtet, so gehen der Menschheit ungeheure, unersetzliche Werte verloren.

Kulturvölker existieren nicht in Menge und vermehren sich nicht wie die Sperlinge, sodass man sagen könnte, es kommt nicht darauf an, ob eines mehr oder weniger existiert. Das geht um so weniger an, als die Kulturvölker verschieden sind, und das eine diesen, das andere jenen Wert zu höchster Ausprägung zu bringen veranlagt und berufen ist. So kann und soll jedes auf seine besondere Weise der Menschheit höchst wertvolle Dienste leisten. Angenommen, es wäre wirklich durch eine Kette von Vernichtungskriegen dahin gekommen, dass nur noch eine einzige höchstwertige Kulturnation übrig geblieben und zu grösster Ausbreitung gelangt wäre, während alle anderen Kulturvölker mit ihren besonderen Werten und Fähigkeiten eliminiert wären; wäre dann nicht die Menschheit, ja wäre nicht selbst das sieggekrönte Volk an echten Werten furchtbar verarmt? Sollen die relativ wenigen Kulturvölker, von denen jedes auf seine, vielleicht unersetzliche Weise der Menschheit hohe Werte schenken kann, um der äusserst problematischen Kriegsauslesewirkung willen auf's Spiel gesetzt werden? Ob die kriegerische Vernichtung eines Kulturvolkes den Aufstieg eines wertvolleren Volkes mit sich bringt, ist sehr fraglich; sicher aber ist, dass sie einen ungeheureren Wertverlust für die Menschheit darstellt.

In der kriegsdarwinistischen Völkerauslese-Hypothese steckt jedoch noch ein anderer Fehler, den wir in unseren kritischen Betrachtungen bisher übernommen haben. Unterliegen im Daseinskampf bedeutet nach Darwin's Lehre Tod und Verhinderung der Nachkommenproduktion. Unterliegen im Kriege aber bedeutet keineswegs dasselbe. Vielmehr kann das unterlegene Volk, sogar trotz Knechtung und Not, sich schneller vermehren als das siegreiche; jenes kann dieses so allmählich überwuchern und seine Rasse aufsaugen und zum Verschwinden bringen, mag dieser nun höher-, gleich- oder minderwertig sein. Um so eher kann dies geschehen, als Wohlstand, der ja dem Sieger manchmal zuteil wird, die Fortpflanzung herabzusetzen pflegt. Sieg im Kriege bedeutet also noch keineswegs Sieg im biologischen Sinne, Aufstieg und Ausbreitung der siegreichen Rasse. Die Geschichte Europa's zeigt uns, dass machtpolitische Vernichtung eines Staates Fortbestand und Ausbreitung des betreffenden Volkes keineswegs ausschliesst, und dass dieses dann, wenn im Wandel der Zeiten der politische Druck schwindet oder überwindbar wird, wieder zu selbständigem Leben gelangen kann.

Die Gefahr einer wirklichen Vernichtung von Kulturvölkern durch Kriege wollen wir keineswegs übertreiben. Zu radikaler Vernichtung einer Volksrasse würde erst die Tötung fast aller Frauen, Männer und Kinder führen. In früheren Zeiten waren wohl ähnliche Grausamkeiten nicht selten; doch wurden Frauen und Kinder vielfach vom Sieger nicht getötet, sondern der Sklaverei überantwortet, sodass die besiegte Rasse völliger Vernichtung entgehen konnte, auch wenn sie aufhörte, als Volk oder in ähnlicher Form eine Rolle zu spielen. Bei radikalen Volksvernichtungskriegen kann schon eher von Auslese in darwinistischem Sinne die Rede sein als bei modernen Kriegen zwischen Kulturvölkern, nach denen zwar die Landesgrenzen hin und her verschoben, nicht jedoch Völker ausgerottet werden. Wir wollen hoffen, dass nicht moderne Kriegsmethoden wieder zu Volksvernichtungskriegen führen; es besteht leider die Gefahr, dass der Krieg wieder in verstärktem Masse auch die nicht am blutigen Kampfe beteiligte Bevölkerung, Frauen und Kinder, dezimiert. Dass er ganze Kulturvölker in Zukunft ausrotten werde, ist doch, so möchte ich meinen, nicht anzunehmen. Die üblichen Folgen moderner Kriege, wie Grenzverlegungen, politische und wirtschaftliche Zwangsmassnahmen, Bereicherung und Verarmung und dergleichen, haben mit natürlicher Selektion im darwinistischen Sinne, bei der es um Sein und Nichtsein geht, sehr wenig zu tun. Jene Kriegsfolgen führen nicht zu wirklicher, endgültiger Volksvernichtung; daher konnte es im Laufe der neueren Geschichte mehrfach geschehen, dass ein besiegtes Volk in einem neuen Kriege zum Sieger wurde. Bei solchem Hin und Her des Kriegserfolges kommt gewiss keine Höherzüchtung durch Auslese, wohl aber eine schwere Schädigung beider Gegner zustande. Wenn moderne Kulturvölker durch Kriege auch nicht vernichtet zu werden pflegen, eine Auslese im darwinistischen Sinne also nicht stattfinden kann, so können sie doch durch Völkerkämpfe und ihre Folgen in ihrer Wertproduktion, in ihren Kulturleistungen schwer geschädigt werden, zum Schaden aller Kulturnationen.

Aber noch in einer anderen, sehr wesentlichen Hinsicht verursachen die Kriege ernste Schädigungen, und zwar bei siegreichen wie bei unterliegenden Völkern. Wenn der Kampf zwischen Kulturvölkern keine zuverlässige Auslese des höherwertigen bewirkt, so bringt er doch innerhalb der kämpfenden Völker eine verhängnisvolle Auswahl zugunsten der Minderwertigen mit sich. Tausende und Millionen von körperlich und seelisch gesunden jungen Männern werden geopfert, während Kranke, Krüppel, Geistig-Minderwertige, feige Drückeberger und sogar Zuchthäusler verschont bleiben. Und unter den Frontsoldaten sind gerade die Tapferen, Pflichttreuen, Opferbereiten, oft auch die Intelligenteren, die als Führer an der Spitze der Truppenkörper stehen und vorbildliche Unerschrockenheit zeigen müssen, ganz besonders gefährdet. Kurz, es ergibt sich eine Massenvernichtung der Höherwertigen, während die biologisch Minderwertigen mehr oder weniger verschont bleiben und in Bezug auf die Fortpflanzung begünstigt sind. Der Schaden für den Rassenwert der kämpfenden Völker kann nicht ausbleiben. Hier handelt es sich um eine wirkliche Auslese im darwinistischen Sinne, um Tod und Leben; aber diese Auslese vernichtet Höherwertige und züchtet Minderwertige, sie stellt eine Anti- oder Contraselektion dar, wie man es in der Biologie genannt hat.

Nicht nur durch die Vernichtung körperlich und seelisch gesunder Menschen wirkt der Krieg schädigend auf die Rasse, auf den biologischen Erbwert eines Volkes. Schon der Umstand, dass er die gesunden jungen Männer für längere Zeit aus dem Volke und aus ihren Familien herauszieht und ihre Fortpflanzung hemmt, wirkt in gleichem Sinne. Diese Hemmung kommt in einer Verminderung der Geburtenzahl, die sehr beträchtlich sein kann, zum Ausdruck.

Die körperlich oder seelisch Minderwertigen, die nicht in den Krieg ziehen, werden aber in ihrer Nachkommenproduktion nicht gehemmt. Sie sind also in der Kriegszeit relativ stärker an der Nachkommenproduktion beteiligt als im Frieden, was die Qualität der Nachkommenschaft der kriegführenden Völker, und zwar der siegenden wie der unterliegenden, verschlechtern muss.

Uebrigens wirkt schon der Militärdienst im Frieden, insbesondere etwa bei längerer Dauer und allgemeiner Wehrpflicht, in gleichem Sinne. Er erhöht das durchschnittliche Heiratsalter der gesunden Dienstpflichtigen; Heraufsetzung des Heiratsalters aber bedeutet Hemmung in der Kinderproduktion.

Aus alledem ergibt sich, dass der moderne Krieg zwischen Kulturvölkern wohl kaum eine fördernde Völkerauslese, sicherlich aber eine Volksrassen-schädigende Individualauslese bewirkt. Vom Auslesegedanken aus ist der Krieg zwischen Kulturvölkern nicht als eine förderliche, sondern als eine äusserst schädliche Form der internationalen Beziehungen zu bezeichnen. Denn die Erbwert- oder Rasseschädigung eines Volkes bedeutet einen sehr schweren Schaden, der durch Vererbung von Generation zu Generation weitergetragen wird. Zweifellos sind schon andere ernste Rasseschädigungen in den Kulturvölkern wirksam, die diese mit Entartung bedrohen; ihr Erbwert ist z.B. schon durch die zu geringe Nachkommenproduktion ihrer höherwertigen Bevölkerungsteile sehr gefährdet. Der Krieg steigert die ohnehin sehr ernste Entartungsgefahr.

Die kurzen Erwägungen, die ich vortragen durfte, wollen und können nicht das grosse Problem erledigen, welches das furchtbare Phänomen des Krieges dem denkenden Geiste und dem sittlichen Willen stellt. Dieses Phänomen ist selbstverständlich nicht nur vom Gesichtspunkte der Auslese aus zu betrachten, sondern von vielen Seiten aus zu beurteilen. Wir konnten in der knappen Vortragszeit nicht einmal das Problem: Auslese und Krieg, in seinem vollen Umfange und seiner ganzen Tiefe behandeln. Wir haben uns auf moderne Kriege zwischen Kulturvölkern als auf das praktisch wichtigste Teilproblem beschränkt. Und zur Vertiefung unserer Untersuchung hätten wir die Frage behandeln müssen, worin der Wert eines Volkes liegt, eine weitschichtige Frage, die uns bis zu den Fundamenten der Werttheorie hätte führen müssen.

So habe ich mich beschränken müssen auf das, was ich Ihnen vorgetragen habe. Die dargebotenen Erwägungen sind in vielen Punkten auch nicht einmal neu; in Deutschland hat O. Hertwig während des Weltkrieges, und ich selbst habe vor fast zwei Jahr-

zehnten ähnliche Gedankengänge skizziert. Aber ich meine, unsere heutigen Betrachtungen sind trotzdem nicht überflüssig. Politisch-philosophische und soziologische Ideen sind wirksame und zuweilen verhängnisvolle Kräfte im Völkerleben. Und so ist auch die darwinistische Rechfertigung des Krieges nicht nur eine theoretisch verfehlte, sondern auch eine praktisch höchst bedenkliche, die friedlichen, wahrhaft menschheitsfördernden Beziehungen zwischen den Völkern gefährdende Lehre. —

Ein Kranz von Hunderttausenden von schlichten Kreuzen zieht weit um meines Vaterlandes Grenzen. Unter ihnen ruhen im Tode vereint Millionen tapferer, treuer Männer, die einst die Blüte and die Hoffnung vieler Völker waren. Die stillen Kreuze und stummen Männer sprechen zu uns allen in einer ergreifenden erschütternden Sprache: Seid auf der Hut, dass nicht fernerhin verhängnisvolle Irrlehren die geistige Atmosphäre der Welt mit explosiven Giften erfüllen; reinigt sie durch das Licht der lauteren Wahrheit, durch den warmen Sonnenschein eines aufrichtigen Friedens.

LA FILOSOFÍA Y LAS RELACIONES INTERNACIONALES

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TODA filosofía implica una actitud axiológica, la cual es condición de la vida jurídica. De ahí la importancia de la filosofía en el desenvolvimiento de las relaciones internacionales. El derecho supone, pues, creencias éticas. Éstas pueden considerarse desde dos puntos de vista: el empírico y el normativo. El primero estudia la realidad ética tal como es, vale decir, considera lo real antes que lo ideal. Semejante criterio es importante, pero no único, pues el filósofo, por serlo, necesita dar cuenta de toda actitud moral. Además, conviene no olvidar que cuando se hace la historia de los valores vividos, o sea previos a la reflexión filosófica, la actitud metodológica del historiador o del psicólogo que indaga el génesis de las creencias morales puede resultar un tanto artificiosa, pues para evocar sentimientos morales es menester contar de antemano con un criterio destinado a distinguir un fenómeno moral del que no lo es. ¿Cabe presentarse como historiador de las costumbres éticas sin ser implícitamente moralista? Sin duda, los hechos morales son hechos, pero no es posible guardar frente a ellos la neutralidad científica del químico. Los fenómenos historiados son mechos para el historiador, pero son ideales para los pueblos cuya moralidad escrutamos. El mismo historiador no escapa a la sugestión moral de su pueblo, pues el análisis ético halla su punto de partida en la moral vivida espontáneamente por la colectividad a que el filósofo pertenece. Esto explica la trascendencia del factor nacional en filosofía, y, por tanto, en las intuiciones éticas. Se ha dicho que la filosofía no tiene patria. Es posible; pero no es menos cierto que el filósofo, como hombre, tiene nacionalidad; y, por más grande que sea su genio, — quizás por esto mismo, — no elude las sugestiones de su pueblo. ¿Reconocer estas influencias implica negar el carácter universal de la filosofía? — De ningún modo. Veamos como es posible para la filosofía cumplir su esencia universal, no obstante los factores locales.

El problema de la conducta humana está en calcular la posibilidad del ideal. Ahora bien: las relaciones internacionales son una forma de la conducta humana. Se trata de relaciones entre grupos humanos llamados naciones. Éstas tienen entre sí vínculos sometidos a criterios morales, quizás discutibles para el filósofo, pero se trata de creencias muy reales, ya que la vida, cosa perentoria, no puede esperar que los filósofos se pongan de acuerdo para confeccionar doctrinas éticas indiscutibles. Cuando el filósofo medita sobre los fundamentos de la conducta internacional, hace tiempo que ésta, de algún modo, ya existe. No hay vida humana consciente, individual o colectiva, sin ideales; y éstos no pierden su eficiencia por el hecho de contar con una fundamentación deficiente. ¿Puede el filósofo moralista, al elaborar sus ideales prescindir de la experiencia moral vivida por las colectividades. máxime la de la nación a que él pertenece? En otros términos: ¿en qué medida lo real entra en la elaboración de lo ideal? Existen sistemas éticos que, a fuerza de idealismo abstracto, ofrecieron teorías impracticables. Tal el caso del intelectualismo extremo. Sin embargo, éste tiene un mérito: el de haber sido fiel a la índole de la filosofía, que es la universalidad. Pero no es menos cierto que una universalidad demasiado abstracta, vale decir, que no se nutre de particularidades, olvida tener en cuenta la fecundidad espontánea de la historia. Reconocer esto último es mérito del intuicionismo.

El problema de la nacionalidad en filosofía y el de la influencia de ésta en las relaciones internacionales, es un caso del problema de las relaciones entre lo particular y lo universal. Inutil sería señalar la importancia del asunto, pues es uno de los problemas más inquietantes de la filosofía de todos los tiempos.

¿Cómo conciliar la esencia universal del pensamiento filosófico con el carácter nacional de la filosofía? Hemos dicho que toda filosofía implica una visión axiológica. También hemos afirmado que la humanidad existe concretamente en forma de naciones, y que cada una de éstas tiene sentimientos axiológicos específicos. Más aún: toda nación tiende a creer que sus valores son los verdaderos, es decir, erige su particularidad en universalidad. De ahí los valores del imperialismo en cualquiera de sus formas. Contra la axiología nacionalista surge el internacionalismo, el cual, por obra de su espíritu racionalista, exige una humanidad libre de valorizaciones locales. Afirma que el hombre es siempre el mismo, o debe serlo, sean las que fueren las circunstancias históricas o geográficas. Empero, la realidad puede más que las fórmulas del internacionalismo. Por eso, quizás, es mejor reconocer que la actividad cultural de los pueblos crea valores, los cuales, no obstante lo particular del origen, acaban por imponerse a otras naciones. Estos valores son susceptibles de ser aceptados y revividos porque responden a obscuras necesidades latentes en el hombre, cualquiera sea la colectividad a que pertenece. Veamos algunos ejemplos. Las intuiciones éticas del misticismo indostánico pueden ser apreciadas por los pueblos de occidente, sobre todo cuando éstos llegan a sentir el vacío íntimo que trae el exceso de civilización mecánica. Y viceversa, quizás el activismo occidental muy bien puede contagiar a la quietista alma indostánica.

Otro ejemplo. Algunos han afirmado que el empirismo es filosofía esencialmente inglesa. Admitámoslo. De ser así, ello no prueba sino que el espíritu inglés, por tales o cuales causas, percibe preferentemente ciertas verdades; pero no por eso deja el empirismo de ser fruto filosófico susceptible de estimación universal. Ante el empirismo, entendido al modo inglés, como en el caso de cualquier filosofía, podemos inferir que el campo de la atención filosófica podría ser más amplio, cosa bien probada por los ulteriores progresos de la filosofía; pero la historia crítica de la filosofía sabe que el empirismo, a pesar de su parcialidad, vale por su aspecto universal. Es pésimo método histórico el que consiste en abusar de la psicogenia de los sistemas. Bueno es convencerse de que el proceso psicológico de un juicio nada prueba contra el valor de ese juicio. De lo contrario, se caería en las frenéticas paradojas de un Nietzsche o de un Sorel, cuando el primero se empeña en probarnos que los valores cristianos constituyen una eflorescencia ética de la degeneración fisiológica; o en el caso de Sorel, quien concibe el racionalismo griego como una sugestión de un ambiente natural lleno de formas geométricas. Es sabido que Sorel, de acuerdo con Bergson, solidariza la lógica formal con los cuerpos sólidos. No discutamos semejantes teorías; pero, aún cuando fueran admisibles, nada probarían contra el cristianismo o el racionalismo.

Para evidenciar una vez más los abusos del psicologismo, permítasenos poner otros ejemplos menos complicados. Dicen algunos psiquiatras que las visiones místicas de Santa Teresa florecen en un subsuelo histérico. Otros alegan la ebriedad de Verlaine. Pero es el caso de preguntarse si alguna importancia tiene la trastienda psico-fisiológica cuando se trata de evaluar las visiones místicas de la Santa o el lirismo sutil de Verlaine. Es insensato hurgar los bajos fondos del alma con el fin de explicar las manifestaciones elevadas del espíritu humano. En todo caso, cuanto más, cabría reconocer que, para lograr lo universal, la naturaleza humana necesita del fermento particularista; y, alguna vez, aún de las formas impuras del particularismo.

¿En qué sentido una filosofía es nacional? Carácter nacional de una filosofía sólo significa que la meditación filosófica puede estar dirigida por determinados modos del sentir colectivo. La nacionalidad de una filosofía sólo está en los motivos psicológicos de la reflexión. El resultado de ésta es universal. ¿Lo es también tocante a los valores, precisamente lo más importante para el derecho internacional? Creemos que el respeto a esa forma de particularidad llamada espíritu nacional no excluye el sentido de la universalidad de los valores éticos, aún cuando cada pueblo tiene una peculiar intuición axiológica. Toda nacionalidad es una manera de vivir la vida. No hay vida fuera de sus maneras, pero no es menos cierto que la vida constantemente trasciende las propias formas en que se manifiesta. Este concepto permite evitar que se sacrifique lo universal a lo particular, y viceversa. Si exaltamos exclusivamente lo universal, caemos en la vacuidad de una abstracción, olvidando las formas espontáneas y creadoras de la realidad nacional; y, si, en cambio, exageramos hasta el exclusivismo la importancia de la particularidad nacional, la filosofía de los valores humanos se vuelve ininteligible, pues se cae en un nominalismo que, por ser absoluto, resulta amoral.

¿Qué misión puede tener, pues, la filosofía en materia de relaciones internacionales? Si algo preciso cabe decir en este asunto es que la filosofía tiene, entre otros fines, el de fomentar el advenimiento de una axiología jurídica de espíritu universal. De ahí la importancia de los estudios filosóficos en las escuelas jurídicas. Y en tal sentido, bien cabe agregar que algo pueden estos congresos de filosofía, los cuales no serían posibles si no admitiéramos la unidad esencial del espíritu humano, unidad que nos permite entendernos a pesar de la multiplicidad lingüística del Congreso. También infiérese de aquí que los filósofos tienen el deber de no dejarse perturbar por las pasiones colectivas del momento, así sea el más dramático. La serenidad no implica abandonar los deberes del ciudadano y del patriota. En nombre del espíritu de universalidad, propio de la filosofía, debemos decir que es inadmisible el echarse a negar los valores universales de un pueblo adversario. Sin un fuerte sentimiento de equidad, penetrado por la idea de lo universal, nada práctico harán los filósofos cuando se propongan tener eficiencia en las relaciones internacionales.

No han faltado autores dispuestos a sostener que el régimen democrático era la mejor garantía contra el imperialismo, de lo cual dedujeron la necesidad de exigir a los filósofos la prédica del ideal democrático. No nos proponemos poner en duda el valor de la democracia como la forma más plausible de gobierno. Sólo queremos poner en duda la tesis de que existe una vinculación necesaria entre democracia y anti-imperialismo, a menos que tales pensadores no se refieran a la democracia tal como existe, sino a la democracia tal como debiera existir. De ser así, confesamos que tal actitud nos resulta un tanto ingenua, y reveladora una vez más de que los filósofos escaso influjo práctico logran cuando se erigen en apóstoles de ideales extramundanos. Si se trata de la democracia ideal, diremos que el remedio propuesto resulta inútil, pues ella supone hombres perfectos, y siendo tales, quedan eliminados los inconvenientes de la moral internacional. En cambio, si la democracia es como es, o un poco mejor, entonces diremos que los hechos señalan la existencia de pueblos imperialistas, no obstante el régimen democrático. Por otra parte, también sabemos que la política imperialista alguna vez fué exigida por partidos democráticos.

¿Caeremos entonces en el pesimismo respecto del papel de la filosofía en el mejoramiento de las relaciones internacionales? En rigor, si nos colocamos dentro de la posibilidad, ni pesimismo ni optimismo. Más bien meliorismo. ¿En qué forma? Si bien se mira, el filósofo sólo puede actuar merced a la práctica educativa, a la acción lenta sobre las generaciones que pasan por la enseñanza y también en virtud de otros medios de difusión del pensamiento filosófico. ¿Qué puede decir un filósofo? Por de pronto, que los ideales éticos son de esencia universal, pero se cumplen paulatinamente complicándose con las efectivas y espóntaneas intuiciones axiológicas de los pueblos. Por tanto, ni nominalismo, ni universalismo abstracto. Aquél es automático y amoral; éste, consciente, pero estéril. En cambio, podría ser fecundo infundir la convicción de que es fuerte factor de progreso espiritual lo que llamaríamos la interpenetración axiológica de las naciones. En otros términos: crear la convicción de que todo pueblo civilizado, así sea el más humilde, ha creado y crea valores susceptibles de contribuir a la evolución de la humanidad, y, al revés, todo pueblo, así sea el más grande, no ofrece intuiciones axiológicas completas, pues sus valores, con ser eminentes, si lo son, no logran agotar las intuiciones espirituales posibles ni reemplazar las creadas por otros pueblos. Es todo un síntoma de buena educación filosófica tener conciencia de lo limitado y quizás precario de los propios valores. Así como el individuo necesita de la sociedad para elevarse a la esencia de sí mismo, del propio modo, un pueblo, por grande que sea, ha menester desenvolverse dentro de la atmósfera axiológica creada por otras comunidades nacionales.

El imperialismo, máxime en sus formas violentas, implica una especie de autopetrificación axiológica del pueblo que lo práctica, perturbando así su propia fecundidad y la de los pueblos vulnerados. Se diría que el imperialismo es una forma teratológica de lo particular. Por eso resulta un síntoma premonitorio de la decadencia, como amenudo lo demuestra la experiencia histórica.

Desarrollar, pues, la conciencia de la relatividad de los propios valores frente a los valores posibles y a la parte de verdad en los valores ajenos, equivale a instituir la equidad como esencia de la obra educativa de los filósofos. Ahora, claro está que si los pensadores se dan a preconizar el darwinismo social, cayendo, por tanto, en un nominalismo negador del espíritu de universalidad, entonces resulta superflua la intervención de la filosofía como creadora de ideales, pues todo se reduciría a comprobar que la historia es un proceso mecánico. Pero ello sería una manera de negar el valor de la educación y por consiguiente la eficiencia de la enseñanza filosófica. Ésta, frente a la historia, concebida como proceso automático, sólo podría proceder como los físicos ante la realidad inorgánica. Tendrá que limitarse a comprobar la existencia de un determinismo absoluto, que por ser tal, no admite la posibilidad de ideales humanos. Empero, si se admite que el mundo histórico es relativamente plástico, entonces cabe esperar no poco de la acción de la filosofía como fuerza determinadora de ideales y capaz de organizar los medios que contribuyen a realizarlos, todo ello con clara conciencia de los aspectos necesarios de la realidad histórica. Cultivar la eficiencia humana y el sentido de su dirección posible, he ahí, entre otros, el papel de la filosofía; pero para ello se necesitan filósofos con viva conciencia histórica, de lo contrario, no pasarán de ser ascetas y, por ende, hombres estériles. El filósofo debe meterse en la historia, no para negarla con ensueños vacuos, sino para contribuir a que ella no pierda su sentido ideal. Ni deificación del hecho, ni platonismo retórico, sino ideal nutrido de realidad. Si esto se olvida, veremos que, a la postre, tanto el nacionalismo imperialista como el nacionalismo abstracto, destruyen lo que pretenden defender.

En síntesis: nacionalismo e internacionalismo constituyen un caso especial del problema de las relaciones entre lo particular y lo universal en el dominio de la teoría de los valores, el cual, a su vez, es un caso del problema más general de las relaciones de lo particular y lo universal en la teoría del conocimiento y en la metafísica. He ahí por qué la filosofía, aún en sus formas más doctrinarias, jamás es inofensiva, pues, directa o indirectamente, siempre implica consecuencias prácticas. Esto basta para probar cuan grande es la responsabilidad moral de los filósofos, aún cuando sean los más retraídos, frente a los acontecimientos históricos. Quizás así lo comprendieron algunos de los más conspícuos pensadores de esta época al intervenir en las polémicas de la última guerra; pero no fuera inoportuno recordar que ellos, en general, pecaron por falta de objetividad, pues, como es notorio, se dieron a negar, por pasión momentánea, los valores más respetables otrora creados por otros pueblos, lo que no les impidió más tarde reconocer cuan poco orgullosos se sentían de haber escrito ciertos libros. Esta confesión implicaba admitir que habían cometido un pecado contra el espíritu de universalidad, esencial para la existencia de la filosofía. Lástima grande que tan generosas confesiones se produzcan demasiado tarde. Ello nos hace presumir cuan poca cosa es el espíritu filosófico si se esfuma precisamente en el momento en que más se le necesita.

THE PART OF PHILOSOPHY IN INTERNATIONAL LAW

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DISCUSSION about law, and even more discussion about International Law, has always been affected for the worse by an assumption that "law" or "the law" are terms with a fixed content, meaning the same to all the disputants. "Law" or "the law" — and this is even more true of the Continental equivalents, *droit*, *Recht*, *diritto*, *derecho* — are not words that mean the same thing to all jurists, much less to jurists and laymen alike. Moreover, "the law" is not a simple conception. On the contrary, a number of elements go to make up the body of law of a developed society, however much we restrict the term "law" to the authoritative materials by which justice is actually administered in a given society.

In the nineteenth century jurists might be classified into three well-marked types or schools. Today, it is true, the lines are relaxing and rigid distinctions are breaking down. Also what may be called new schools have been arising. But, in most connections, the nineteenth-century distinctions still color our thinking, and survival of them into the present is the source of much difficulty in contemporary science of law.

Historical jurists, who constituted the dominant school at the end of the nineteenth century, thought of all social control as "law." At least, when they spoke of the history of "law," they included therein the whole history of social control, and their arguments as to the nature of law were drawn from times and places in which an undifferentiated social control obtained. They did not consider the highly specialized social control through systematic application of the force of politically organized society generically distinct from the undifferentiated social control through religion, traditional ethical custom, politically declared custom, and general moral ideas, which obtains in a more primitive social organization.

On the other hand, analytical jurists used the term "law" to mean the aggregate of precepts by which a specialized form of social control, namely, the legal order (*ordre juridique*, *Rechtsordnung*) is maintained through a politically organized society. In Bentham's phrase, they held that "the law" was an aggregate of "laws." Hence they centered their study upon the legal precept (*loi*, *Gesetz*), conceiving that when that was understood, the aggregate would be understood as a matter of course. Finding that much, at least, of the content of what is called International Law did not conform to this type, they denied that International Law was "law," in any proper sense, and engaged in long disputes with historical and with philosophical jurists in which a controversy over the meaning to be attributed to the term "law" was given the appearance of a controversy as to the nature of International Law.

A third type, the philosophical jurists, who were stronger at the beginning of the nineteenth century than at the end, thought of social control through a moral order, of which the legal order was an imperfect reflection or a subordinate department. Analytical jurists were scornful of this type, conceiving that they were busied, not with anything that was, but with something that they thought ought to be, whereas the analytical jurists flattered themselves that they were treating scientifically of something that actually was. But in truth the philosophical jurists were treating of an actual element in the law quite as much as were the analytical jurists. For legal precepts, with which the analytical jurists busied themselves exclusively, are by no means the whole of the law. A body of authoritative, received ideals, to which legal precepts are made to conform in their development and application, by which judges and jurists are guided in their choice of starting points for legal reasoning, and through which judicial finding of the grounds of decision of particular cases is given direction, are as much a part of the authoritative materials by which justice is administered as are any legal precepts. Indeed, the crucial element is usually to be found here, as one may see readily by studying judicial development and application of the historical phrase "due process of law" in American constitutional law.

Each of the three nineteenth-century methods of Jurisprudence (*Science* — or *théorie gênerale — du droit*, *Rechtswissenschaft*) has to do with an element in the whole body of the law which is quite as important as any other. It is futile to dispute which is *the* method. Rather our science of law must employ each, both in the science as a whole and in the treatment of particular branches or departments. But in International Law we have had to use the historical and the philosophical methods chiefly, since the analytical method is adapted only to matured legal systems. It postulates a highly specialized legal order. It presupposes a social control in which other agencies in the end operate in subordination to politically organized society. It assumes a degree of differentiation which has not been reached, or has been reached but partially, in international relations. Recently something like a specialization of this sort has gone forward more rapidly. But there is still far from being what the orthodox analytical jurist would like to concede to be a true body of law. On the whole, the historical jurist has been nearest to the truth with respect to the nature of International Law.

We may say, then, that statements of International Law are attempts to formulate a system of social control of the external relations of politically organized societies. In the seventeenth and eighteenth centuries, under the influence of the law-of-nature school, the ideal element was stressed. What ought in reason to be the principles of social control of international relations, were taken to be legally binding because of their intrinsic moral force. By way of reaction, English-speaking jurists turned to a combination of positivism and rationalist political theory. Their juristic position was analytical. Their political starting point was the rationalist consensual theory that obtained at the end of the eighteenth century. Law was a body of precepts. Therefore International Law was a body of precepts. The basis of the authority of these precepts was that nations had agreed to observe them, this agreement or consent being shown by the received practice of nations. Hence when it was claimed that any proposition was a precept of the law of nations, it was needful to observe the received practice of states in order to see whether it had been recognized and consented to as such.

Today this mode of thinking takes form in demands for codification of International Law, in the provision in the statute of the Permanent Court of Arbitral Justice that decisions must be according to "law" (i.e., rules of law) unless otherwise specially agreed, and in provisions of arbitration treaties requiring decisions to be strictly and exclusively grounded upon received International Law. It requires little study of the decisions of international tribunals to demonstrate the futility of such attempts to exclude creative finding of the law and reference, avowed or subconscious, to ideals of what International Law should be. If historical jurists have been nearest to the truth as to the nature of International Law, philosophical jurists have been nearest to the truth as to its content.

All discussion of what the law is on any given point is profoundly affected by ideas of what it ought to be. It is impossible to separate, for long, questions of what the law is from questions of what the law ought to be. If we give up the older philosophical theory of a moral order of which the legal order is only an imperfect reflection

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or a subordinate department, we must still recognize that the decisive, the enduring element in International Law is received ideals of what international relations ought to be, of what we seek to achieve through International Law, and hence of what the particular precepts of a system of International Law ought to be and how they ought to be applied in action. It is the business of the jurist to study, and give definiteness to, and systematize these received ideals quite as much as the received precepts. Indeed, exposition and systematization of precepts of International Law will be futile if this element of received ideals is ignored. For each jurist and each foreign office and each member of each international tribunal will develop and interpret and apply the formulae of the precepts according to his or its understanding of the received ideals. Thus what seem definite, fixed formulae, will prove to have a varying and disputable content. The history of codes and statutes in private law and the controversies in American public law furnish abundant examples in support of this assertion.

Social control of international relations may be military, as in Oriental empires and in antiquity, or religious, as in the Middle Ages, or juristic, as in the modern world. International Law is a systematized, formulated body of the materials of juristic social control of the relations of states. It had its origin at a time when Western Europe was passing out of a period of strict law; when a philosophical development was about to remake the strict law of the later Middle Ages into systems of matured law which could go round the world in the next two centuries. It was a time when the Reformation, the breakdown of the mediaeval academic idea of "the empire," and the rise of modern nations had taken away the bases of universality; and yet the need of universality had become greater than ever as the conflicting and overlapping claims of the newly centralized nations, each conscious of new-found power, ambitious, and jealous of its dignity, led to destructive conflicts. Military superpolitical, supernational control became impossible with the differentiation and centralization of modern nations, each claiming to be the equal of its neighbor. Religious supernational control seemed to have been precluded by the Reformation and later by the ideas of the Puritan Revolution. Law had been a conspicuous subject of academic study for four centuries and the science of law was the one universal science whose authority had not been shaken. Control by law seemed clearly indicated, and this fitted well with the philosophical ideas of the era of rationalism and the unbounded faith in reason that followed the Renaissance.

Four elements entered into the making of International Law. First, we must count the secularized natural law of the Protestant jurist-theologians, as it was taken up and given currency by Grotius and thus became the dominant theory of jurisprudence, politics, and International Law for two centuries. This is a rationalist element, and, on the whole, it was the decisive element.

Second, we must put the political thinking of the era of rising nationality. International Law arose in a time of absolute political theories in an era of relatively highly centralized personal government — the era of one-man rule in France, in Spain, and in England. Everywhere the tendency was to supersede the mediaeval regime of local jurisdictions and loose feudal relations to a central power by a highly developed central authority concentrated in one ruler. Hence the classical International Law postulates a regime of highly centralized absolute governments. It presupposes that the legal precepts governing adjoining land owners in Roman Law are applicable to neighboring states; that the rights and duties of Titius and Seius and Maevius can be made the rights and duties of kings and princes, as sovereign over their domains as the former were masters of the farms which they owned. Much of the ineffectiveness of the classical International Law in the world of today is due to the inapplicability of this assumption to such congeries of states as the British Empire, to such federal states as the United States, to states organized on the ideas of popular sovereignty that derive from the French Revolution, and generally to the more or less democratic states of the last half of the nineteenth century. We may call this second element the political element.

A third element is purely ethical or moral. It is the application to states, or rather to princes and rulers, which in the circumstances of the time was the same thing, of the principles of the clerical doctors who studied and debated and taught the solution of difficult problems of individual conduct. As things were, international relations presented problems of individual human conduct. The relations of one absolute ruler to another were entirely analogous to the relations of one free neighbor to another. Certain political considerations might complicate the ethical problems presented. But at bottom the principles were the same. This element came into International Law through the work of the Spanish jurist-theologians of the counter-Reformation. The extent to which it entered into classical International Law has not been studied as it should be. Practices that are not part of received international usage go back to determinations of Spanish diplomatic and administrative authorities made after consulting university faculties or doctors of theology and obtaining formal reasoned opinions. Much that has been attributed to experience and assumed to be a historical element had its origin in this moral element.

A fourth element was Roman private law. With the breakdown of the conception of an "Empire," embracing all Christendom and continuing the empire of Constantine and Justinian, it could no longer be claimed that Roman Law was in force as authoritatively binding legislation. Hence a new academic juristic theory arose that Roman Law was embodied reason. But the philosophy of the time held that men, as rational creatures, were bound to act by reason. What reason pointed out as right was law for the very reason that it was right. Thus the precepts of Roman Law governing the relations of free men and of neighboring owners, as embodied reason, were binding upon princes and rulers in their relations with one another. This may be called the positive element in the classical International Law.

Looking back at these elements, it is manifest that none of them is adapted to the needs of a social control of international relations today. The classical natural law has survived to some extent in French and in American constitutional law. But the natural law of the metaphysical jurists of the nineteenth century was a very different thing and the revived natural law of the present century is still another thing. One has but to read pronouncements in terms of the classical theory made during the late war to see how completely it has failed as the basis for any vital system for today. That the second element is out of relation to the times goes without saying. The last of the states such as the classical International Law postulates has come to an end. If certain types of government are arising that bear a superficial resemblance to those of the seventeenth and eighteenth centuries, yet even when we deal with these we must be conscious that we are dealing with a whole people, and that duties of rulers, as individual men, and imposition of restraints and penalties upon a whole population are different things. But the third and fourth elements found their whole basis in the second. If the analogy of states to individual human beings breaks down, these elements, or the materials that derive from them today, must be put on some other foundation.

In the nineteenth century jurists sought to replace the ethical-philosophical system of the classical International Law by a positive system, derived from comparative analysis of received international institutions and practices. Indeed, all three of the nineteenth-century schools of jurists coöperated in this attempt to put International Law on a new basis. The metaphysical jurists, the nineteenth-century representatives of the philosophical school, and hence the successors of those who founded International Law, sought to replace the system of natural law by a system of corollaries of some one fundamental idea — usually the idea of a free sovereign state, analogous to the idea of a free-willing individual man. This idea, demonstrated metaphysically, was then verified historically. At the same time the historical and the analytical jurists were at work upon the content of International Law. To the one, its precepts represented experience in the adjustment of international relations, taking form in principles and rules in which the idea of a free, equal, sovereign state was realizing. To the other, they represented a body of received rules, dictated by utility, and deriving their force from agreement to receive them as law. The theory of the metaphysical jurists was useful in organizing the ideal element of International Law for the last century. The ideal of a free, equal, sovereign state was a guiding factor in more than one formative area in the law. But beyond this, the historical and the analytical jurists had things their own way. They were able more and more to insist that we must look exclusively to the historically given or consensually received materials. Nothing could come into International Law by creative juristic activity. We must continue to work over the old materials with the unconsciously used aid of the metaphysical jurists, and with the traditional juristic technique. International Law of this type broke down conspicuously under the stress of the present century.

Thus the method of regulation of the external relations of politically organized societies has gone through the phases of authority (military or religious) in antiquity and the Middle Ages, of rationalism in the seventeenth and eighteenth centuries, and of empiricism in the nineteenth century. A new method is called for urgently, and philosophy must respond, as it did to like calls in the seventeenth and in the nineteenth century. For our difficulties are in the very foundations of International Law. Neither the seventeenth-century nor the nineteenth-century philosophical approach will serve us. They both presuppose the political regime of the seventeenth century. They are alike inapplicable to such phenomena as the British Empire and to the states governed by public opinion which are the rule today. Moreover, the ideal of an absolute prince governed wholly by reason and the ideal of a free, equal, sovereign state, asserting only the rights that flow logically from its freedom, equality, and sovereignty, and performing the duties reciprocal to those rights, must give way to an ideal or a system of ideals that expresses ideally the facts and needs of international political organization and international relations of the twentieth century. To find and develop and systematize these ideals must be the work of political and legal philosophy.

I am not here with a system nor even with the adumbration of a system of social or legal or political philosophy wherewith to regenerate International Law. Indeed, I doubt if we may expect one to spring into existence at once. The conditions that led up to the classical theory had existed for some time and the elements that went into the classical International Law had been long developing before the theory and the system took form in the epoch-making treatise of Grotius. But it is something to recognize the task that is before us, to perceive the inadequacy of the theories and methods of the last century, and wherein and why they are inadequate, and to ask ourselves what are likely to be the elements of a new theory of International Law and whence a more adequate International Law is to derive its materials.

Some of these questions are for the jurist rather than for the philosopher. One point, however, must be insisted upon which is for the philosopher, namely, that we have to do with a phase of the theory of values. The attempt of the nineteenth century to divorce jurisprudence, and hence law and International Law, from all consideration of morals, has proved futile in every connection. In International Law, where so much is still formative, where so much awaits juristic creative energy, it has been deadening. One need only compare the great achievements of International Law in its classical period with the jejune results of the last half of the nineteenth century to see how the historical and analytical positivism of the last century has operated as a drag.

We may concede that the classical method was wrong in its confusion of what each jurist thought was right with what is legally binding upon sovereign states. But it did not follow that all juristic speculation as to what ought to be was idle. On the contrary, it had to do with one of the elements of the law that was quite as important in itself and more important for the development of the subject than the details of received precepts and acknowledged institutions. The nineteenth-century jurists who insisted on a positive International Law were right in so far as they differentiated the element of positive precepts from the traditional technique of developing and applying precepts and from the element of received ideals. But they were wrong when they sought to exclude all but the body of precepts from the province of international lawyer and jurist.

In International Law we seek to integrate or to harmonize the conflicting or overlapping claims which men assert through politically organized societies as against men in other like societies. To do this effectively our first step must be to inventory, as it were, the claims that press for recognition and securing. The classical International Law did this in a way in its scheme of the natural rights of states. But this scheme was deduced from the qualities of a perfect abstract state on the analogy of the qualities of a perfect abstract man. The scheme of claims must be approached from the other direction. We have to consider not merely what, as we conceive it, men ought to claim, but what they do claim. Hence we must study the history of international relations, the present situation in international relations, and the whole material of International Law in order to see what claims have been asserted, what claims are now asserted, which have been recognized and which rejected, and why.

Next we must classify the asserted claims in some way which will enable us to treat them, as it were, in gross, while recognizing that at bottom we are dealing with concrete claims of concrete human beings. Next we must determine which to recognize and to what extent; and this means that we must find a measure by which to weigh them or a standard or set of standards by which to value them. Finally, we must find means of giving effect to those which we recognize.

Nineteenth-century science of law ignored the problem of enforcement, which is now coming to be recognized as one of the central problems of jurisprudence. In International Law this problem is ignored because in the classical theory the source of authority of the law is its intrinsic reasonableness. An abstractly just precept would enforce itself because of the appeal to reason and conscience involved in its intrinsic justice. Such a theory assumes an agreement upon the details of justice which is not to be found at the crisis of a conflict of interests. It is no more a workable theory of enforcement in international relations today than the like theory of the basis of authority of the municipal law, which was not without some plausibility in the rural, agricultural, pioneer America of one hundred years ago, is workable in the urban, industrial America of the present.

Thus three fields of study for the philosophical jurist are presented by the needs of International Law: (1) organization and systematization of the ideal element of International Law; (2) working out of the claims that are to be integrated or harmonized, and of a classification of them that will enable the jurist to treat them effectively in determining which to recognize and how to delimit those which he recognizes; and (3) a theory of enforcement or of giving effect to the claims when recognized and delimited. But behind each of these problems is the ultimate problem of values. The ideal element must be organized and systematized with reference to values, as it were, of international life, or, in the end, values of human life. The classification, recognition, and delimitation of claims must proceed on a scheme of values. The theory of enforcement must involve questions of value, since in action it comes down continually to compromises and adjustments that require us to consider whether the gain is sufficient to justify the loss.

At one point jurist and philosopher, very likely, will not be in accord. The jurist must insist on a method that is consistent with more than one philosophical starting point; a method that is not tied irrevocably to some one metaphysical platform. The seventeenth-century method did great things largely because all men were agreed upon it. The nineteenth-century conception of the free and equal sovereign state, and the logical deductions from its freedom, equality, and sovereignty, could be and were reached from the most diverse philosophical positions by jurists of every type of philosophical opinion. Until we get some such system, that is compatible with divergent philosophical starting points, we shall make little progress. The science of law cannot wait until all metaphysicians are agreed before going about its practical tasks.

Our juristic method may well be rational-empirical. Observation gives us our catalogue of claims. Reason systematizes them. Reason from experience of international relations points to those which should be recognized and shows how to give effect to them. But beyond this we must turn to philosophy. At bottom there is a philosophical problem of value. All claims cannot be recognized, nor can those which are recognized be allowed to their full extent. Recognition, delimitation, and enforcement must each be a matter of relative values.

After the papers in the General Session of Division C, communications were read by F. C. S. Schiller (Oxford), G. Kuwaki (Tokyo), and N. Hartmann (Cologne).

COMMUNICATION ON PHILOSOPHY AND INTERNATIONAL RELATIONS

F. C. S. Schiller
(Oxford)

I DO not know whether philosophers are often troubled by the question of the social service which it is in the power of philosophy to render; yet the problem is an old one. Plato recognized it, and solved it by inviting all mankind to submit to the absolute rule of a philosopher-king. All above the age of ten were to retire from the city, and to leave the philosopher-king to exercise all secular and spiritual functions, from that of universal nurse-maid upwards.[1] Aristotle, not unreasonably thinking this Platonic scheme a bit fantastic, propounded a solution which is at bottom more fantastic still. For, whereas the philosopher-king was at any rate to earn his keep by doing social service, the Aristotelian "sage" was to be utterly useless. The most that could be claimed for him was that he deserved social support as a beautiful exemplar of human nature at its highest who had dedicated himself to a contemplative life which must evoke aesthetic admiration. This conception of the function of philosophy has always appealed to the academic man; it may explain why we are all such devoted Aristotelians at Oxford.

But as circumstances are rapidly growing less propitious to it, I will venture to suggest to philosophers a vital and very necessary social service which, just now, they can perform better than any one else. Thanks to the discoveries of science the globe has been shrinking rapidly, and the whole earth now enters into the social environment of most of us. Our trade, our wars, our news, our fashions, our films, are now spread over the whole earth. No country can now solve its social problems in isolation, not even America. For many purposes the world is unified already; for the rest unification is bound to come, say in a century or two. But our politics are still very backward: they are nationalist and separatist and vehemently recalcitrant to unification. Now herein lies a very grave danger. For, if the tribes of men continue to indulge in periodical orgies of nationalistic violence, the whole earth is exceedingly likely to come to grief. Our civilization, and possibly our race, will go under in the next world war, or at latest in the next but one. To work to stave off this disaster, therefore, becomes an urgent social need.

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[1] See *Republic*, 540 E.

In this work, it seems to me, philosophers ought to take a leading part. They ought to look further ahead, to take a wider view of the circumstances of life as a whole, to perceive the trend of events, to prepare men's minds betimes for what is coming, to influence them to act as reasonably as their nature permits. For philosophers should not be myopic specialists, as we are reminded by the President of this great University, and should have leisure to reflect on the larger and more distant issues.

For this service all others seem to be disqualified in one way or another. The politicians, who rise to power by various means under various institutions, all have two faults. They are all opportunists who can not afford to look far ahead. And they are everywhere incompetent, even to achieve their own ends. So they have made a sad mess of the world. The soldiers are even worse than the politicians: they can not even hold the dictatorships they seize, and offer to the world no prospect but an unending series of sordid pronunciamentos. Religion has clearly ceased to be catholic, except in name, and the churches have all reverted to the cult of tribal gods. The scientists are nothing if not specialists, and despise wide views. The lawyers are mostly traditionalists, unwilling to look beyond the letter of the law. The business men, even though their trade may span the globe, are too busy to trouble about the ulterior consequences of their trading.

But here perhaps an exception should be recognized. The international banker is perhaps an alternative to the philosopher as a unifier of the world. He would unify it differently, no doubt, after a fashion of his own. His business is to grant loans and he has to see to it that the security is good; this gives him the power to tame the seething nationalisms by the steady pressure of financial control.

Now this is far preferable to military control and alien oppression, which always lead to war; but still it means constraint. Philosophy alone can urge the need of international coöperation and eventual union by rational reflection, and uproot the terrific snags of prejudice that block the way. Will philosophy succeed? That is a question *you* must answer.

But in whatever way world-union is achieved, it is to America that we must all look for guidance. To the first great source of American influence, the American film, which is rapidly Americanizing popular morals all the world over, a second has recently been added in American finance. The financial resources of America are now the greatest in the world, and, with a few exceptions, the rest of the world is desperately needy. The American banker, therefore, has the power to control the world, if he has the intelligence.

And I do not see why American philosophy should not become a third source of Americanization. For the American philosopher has the requisite intelligence, if he has the power to persuade the other philosophers. I know, of course, that the others are kittle cattle. But the American philosophers are mostly pragmatists, more or less, and pragmatists are often practical. Nor can a pragmatist philosopher cherish a nobler ambition than that of mediating between the distracted peoples of the earth and of setting their feet firmly in the paths of peace.

COMMUNICATION ON PHILOSOPHY AND INTERNATIONAL RELATIONS

G. Kuwaki
(*Tokyo*)

Mr. Chairman, Ladies and Gentlemen:

It is a great honor for me to speak in this large assembly, but at the same time a great anxiety for me, for I am utterly unaccustomed to speak in English or in any other foreign language. I don't know whether it is owing to the fact that I came here from Japan across the Pacific Ocean, that I was destined to speak here on the relation of philosophy and pacifism, philosophy and eternal peace.

Some eighteen years ago, when I was in Europe and America to complete my studies, I was rather astonished and disillusioned to find that the students of philosophy lacked very much the sense of international relationship. The scholars in the domain of natural sciences have been very closely related to each other. While all the names and works of one country were known to other countries, the students of the so-called spiritual sciences were generally indifferent to their colleagues in other countries. Sometimes in the case of social and philologico-historical sciences (which are perhaps also natural sciences) this neglect had many exceptions. But in philosophy the ignorance of the doctrines of other nations seemed to be very conspicuous. As I attended the third meeting of the Congress at Heidelberg, I found that the knowledge of pragmatism was comparatively very scant among the scholars of other countries, especially Germany. And the same thing may be said of the other countries about different subjects. This state of affairs is now changing as is well shown in this Congress.

Now one may say that philosophy has a close relation with the national character of the people among whom it was established. It is true, and we can prove it historically. But to this national character, I can not at all attribute absolute invariability. That people differ with each other is an undeniable fact, but this fact is not the norm. And the unchangeable element, when we trace the historical development, is to be reduced to form. Hence we must not emphasize too much the difference among national characters. Rather we may consider the importance of the influence of the general tendency of the world at some stage of development — *Zeitgeist*. From this point of view we can easily find the unity among different national spirits, and on this unity philosophy has its basis.

From this we can conclude the relation of philosophy and internationality as follows:

1. Philosophy is sometimes called the universal science of the sciences; it must have to this extent the nature of universality. If philosophy can connect various sciences with its universal principle, why is it not able to connect the so-called national spirits?
2. Philosophy is the product of the free, unbiased mind; in this respect it is often contrasted with religion. May this not become a source of free intercourse and good understanding among nations?
3. Philosophy is said to be fundamental. Does not this spirit promote the really true interpretation of several national spirits?
4. Philosophy cherishes broadmindedness. This spirit finds identity in difference everywhere.

We hear often of the differences among customs. These differences may easily be cancelled by a study of the customs. We are told that East is East and West is West. In one sense, it is true, but in another and more important sense, it is not true. The more deeply and more accurately we investigate the customs and culture of different nations, the more manifest becomes the similarity among them; for the root of these cultures is the human mind itself, and the human mind, *qua* human, and as far as philosophers can see, must be one, and is one, I am sure.

So we may conclude with the hope that it is not impossible to join the hearts and minds of different nations. Philosophy, with art, literature, and religion, must be one of the chief factors in the task.

ZUM THEMA: PHILOSOPHIE UND INTERNATIONALE BEZIEHUNGEN

Nicolai Hartmann
(*Cologne*)

ES ist heute an dieser Stelle viel aus dem Wesen der „internationalen Beziehung" heraus argumentiert worden, aber wenig aus dem Wesen der „Philosophie." Nun aber ist Philosophie eine mindestens ebenso internationale Angelegenheit als internationale Beziehung eine philosophische. Es sei deswegen in Kürze versucht, die andere Seite der uns vorliegenden Frage zu beleuchten. Die Kürze der Zeit verbietet mir alle Ausführung und Begründung. Ich will also nur die Thesen selbst geben, in der Hoffnung, dass ihr Eigengewicht gross genug ist, um für sich selbst zu sprechen.

1. Internationale Beziehung gibt es auf allen Gebieten des geistigen Seins: in der Literatur, in der Kunst, ja im blossen Zeitstil des jeweiligen Lebens, von der Technik bis zur wechselnden Mode, von der Wirtschaftsform bis zum reinen Gedanken. Der Gedanke aber nimmt hierbei eine Sonderstellung ein. Er „steht" nicht nur im Verhältnis zu dem, was er fasst, sowie zum fremden Gedanken fremdartiger Denkweise, sondern er „fasst" auch wiederum das Verhältnis, in dem er steht, er macht es zum Gegenstand. Er ist Gedanke seiner selbst und der Welt, die er fasst; in ihm ist die Welt „für sich," indem sie das, was sie ist, „für ihn" ist.

2. Die Philosophie ist nichts anderes als der reine Gedanke. Sie also ist das „Fürsichsein der Welt." Denn sie selbst mit ihrem Träger, dem denkenden Menschen, ist Glied der Welt, indem sie zugleich ihr Gegenglied ist, dasjenige, „wofür" sie ist, was sie ist. So wenigstens liegt es in ihrem Wesen und ihrer Idee. Ihrer Idee nach also kann sie niemals etwas national begrenztes sein, wie sehr immer es wahr bleibt, dass sie stets auf dem Boden einer geprägten Nationalität wächst und die Prägung an sich behalten muss, solange sie ein Lebendiges ist. Das ideale Wesen ihrer Tendenz hebt immerfort die Grenzen ihres geschichtlichen Ursprungs auf. Die Grenzen ihres geschichtlichen Ursprungs aber halten sie immerfort im Leben und in der geschichtlichen Wirklichkeit fest.

3. Was eigentlich ist philosophisch das internationale Verstehen? Es ist das strenge Analogon zum geschichtlichen Verstehen. Hier wie dort sucht der raumzeitlich geborene und gebundene Gedanke, über sich hinauszuwachsen, indem er den ferngeborenen fremden

Gedanken zu fassen sucht. Nur die Dimension des Ausschauens ist eine andere; dort ist es die der Succession, hier die der Simultaneïtät. Aber in beiden Fällen erfasst er sich selbst am meisten, wo er das ihm Fremde und Andersartige fasst.

4. Das geschichtliche Sein des Menschen nun steht in Abhängigkeit von seinem geschichtlichen Verstehen seiner selbst. „Geschichte" im strengen Sinne hat nur, wer ein Bewusstsein seines geschichtlichen Seins hat, d.h. wer ein Wissen hat um seine Stellung im Weltgeschehen, um Vergangenheit, um geistige Heredität, um die Aufgaben, die ihm in seiner Zeit und an seinem Teil zufallen — und, sofern Aufgaben in die Zukunft zielen, auch um die Zukunft. Denn das Zukünftige allein steht seiner Initiative offen. Durch dieses Wissen unterscheidet sich der Mensch als geschichtliches Wesen von allen anderen Wesen, als welche wohl im Weltgeschehen stehen, aber nicht Geschichte machen.

5. Ebenso ist es im interpersonalen und internationalen Verstehen. Jenes ist das Sein der Einzelpersonen füreinander, dieses das der Völker füreinander. Ein Sein in der contemporänen Gemeinschaft der Menschheit hat nur, wer diese erfasst — und zwar erfasst nicht als ein Accidens seiner selbst, sondern als Bedingung seines Wesens, d.h. als die Wechselbedingtheit der Völker im Strom ihres geschichtlichen Daseins. Der Einzelmensch für sich allein ist eine Abstraktion, er existiert nur in der Gemeinsamkeit, in die er hineingeboren wird; und ebenso ist die einzelne Nation für sich eine Abstraktion, im wirklichen Weltgeschehen gibt es sie nur und nur in übernationaler Wechselbedingtheit. Wie die Aufgabe des Individuums im Connex mit anderen Individuen liegt, so die der völkischen Individualität im Connex mit anderen Völkerindividuen: in der sittlichen Stellungnahme, dem Geltenlassen des Fremdartigen, in der Würdigung, Anerkennung und Auswertung der fremden Eigenart, ja schliesslich in der gegenseitigen Einwirkung. Alles kulturelle Wachstum, selbst in seiner völkischen Besonderheit, ist schon eine Funktion solcher befruchtender Gegenseitigkeit im Geben und Nehmen.

6. So ist das Verstehen im Sinne des geistig-gedanklichen Seins eine zweidimensionale Bedingtheit — in der Zeitfolge und in der Zeitgemeinschaft —, eine Bedingtheit des Seins durch das Verstehen und wiederum des Verstehens durch das Sein.

7. Die Wissenschaft ist ihrem Wesen nach „objektiver Geist." Sie kann nie Sache des Einzelnen sein. Ja, sie geht nie im einzelnen Kopf auf. Der Einzelne kann nur teilhaben an ihr und günstigen Falls sie weiterbewegen. Dieselbe Stellung hat ihr gegenüber das

Völkerindividuum, wennschon es gelegentlich einmal auch alleiniger Träger eines Wissenszweiges sein kann. Es liegt im Wesen der geistigen Werte, allen zu gehören, die sie zu fassen befähigt sind.

8. Die Philosophie hat das besondere, dass in ihr die Grundfragen selbst stabil werden. Der Mensch steht als Denker heute wie vor Jahrtausenden vor denselben Welträtseln. Nur seine Lösungsversuche wechseln, die Probleme kehren ewig wieder. Hier liegt die Basis alles gedanklichen Seins. Wer in der Philosophie nichts als eine „Ausatmung der Wissenschaften" sieht, bleibt in der Enge des zeitbedingten Positivismus hängen; wer in ihr nichts als die Folge der immer einseitigen und fehlerhaften Lösungsversuche erblickt, endet im Historismus und erhebt sich überhaupt nicht zur Höhe des philosophischen Gedankens. Philosophie ist weder das eine noch das andere. Sie ist das gedankliche Leben der Probleme selbst, als der ewig identischen Rätsel des Daseins und der Welt; und darüber hinaus ist sie die fortdauernde Arbeit des Gedankens an ihrer Bewältigung. Darum ist sie nicht dogmatische Entscheidung, sondern Forschung und — nach dem Worte Platons — ein ewig Mittleres zwischen Wissen und Nichtwissen.

9. Von höherer Warte aus aber bedeutet das für unser Problem genau dieses: Philosophie ist das Begreifen der Welt durch den Menschen. Insofern ist sie in der Tat das „Fürsichsein" der Welt. Im Gedanken des Menschen eben wird sie, was sie sonst nur „an sich" ist, „für sich". Nun aber sind wir, die Begreifenden selbst, mit zum Begriffenen gehörig; wir müssen uns selbst als die Begreifenden wiederum begreifen. D.h. wir selbst müssen, ebenso wie sie, was wir „an sich" sind, auch „für uns" werden. Insofern kann sich die Welt erst in uns, den Begreifenden, vollenden. Man kann das auch so ausdrücken: ohne uns als die Träger des Weltgedankens ist die Weltschöpfung unvollendet.

10. Das aber ist sinnvoll nur, wenn der Einzelne sich selbst als Glied eines gesamten Weltbegreifens sieht. Er muss die Begreifenden alle mit begreifen, und zwar in ihrer Eigenart und in der Besonderung ihres individuellen Begreifens, nicht im Schema und in der Nivellierung. So erst wächst das Fremde, der fremdartige und fremdvölkische Gedanke ihm zum eigenen Gegenstand aus und zum Eigenwert. Das Sicheinsetzen für diesen Eigenwert ist der absolut übernationale Charakter des philosophischen Gedankens seiner Idee nach: ein Erkennen, das zugleich ein Lieben und Umfassen ist, ein Ergänzen und sich Auswachsen zum Ganzen. Und da wir Menschen nicht Götter sind und immer national bedingt bleiben — auch in unserem Denken —, so ist die einzige Form, in

der wir den Sinn der Philosophie an uns erfüllen können, die internationale Einstellung unseres Denkens. Der Idee nach ist sie eben eine übernationale.

11. In dieser Begrenzung ist die sublime Aufgabe, die uns hier erwächst, keine übermenschliche. Wir haben keinen Grund zu schwächlichem Verzicht. Und darum: *φιλοσοφοῦμεν ἄνευ μαλακίας* — d.h. sehr frei übersetzt: wir philosophieren ohne Pessimismus. Ob unsere Zeit der Aufgabe gewachsen ist, mag sich erweisen.

II. SECTIONS OF DIVISION C

SECTION 1

Time: Tuesday, September 14, 9.30 A.M.
Place: Gore Hall Common Room
Subject: The Basis of Objective Judgments in Ethics
Chairmen: GEORGE HERBERT PALMER, Harvard
THEODORE DE LAGUNA, Bryn Mawr

THE BASIS OF OBJECTIVE JUDGMENTS IN ETHICS

JOHN A. RYAN
(*Catholic University of America*)

PRECISION and unity of treatment seem to require from us certain preliminary assumptions. First, our topic does not call for an incursion into the field of epistemology. Second, moral good or moral evil are objective realities, existing independently of moral judgments. Third, good and evil, virtuous and vicious, and their cognates, imply objective relations between a human act and a norm of conduct. Fourth, the predication of these qualities is not purely subjective nor arbitrary; it is not like the act of attaching wings to one's self in the realm of imagination or in the land of dreams. In short, there is a basis for moral judgments in the world of external reality, in the world which is distinct from the act of judging.

As a supplementary assumption, moral judgments are objective in the sense of universal rather than merely individual. Thus, the declaration that Brown's action is immoral, is potentially universal, inasmuch as it is applicable to all actions presenting the same conditions of object, motive, and circumstances.

Moral judgments may be true or false. Obviously the latter kind is not objective in the sense of conforming with reality. A false moral judgment is not a correct representation of the relation which it professes to describe. Nevertheless, it is thought to be so by the person who utters it. He does not intend to perform a purely subjective act.

There is an important sense in which even false ethical judgments are objective. For the sake of illustration, let us assume that the theory of individualistic hedonism is irrational and false. Let us assume that not every act is good which brings pleasure to the performer. It is immoral to commit rape, regardless of the pleasure which the act may bring to the aggressor. But if the latter maintains that the true norm of conduct is individual pleasure, as so estimated by the individual himself, his judgment is not purely subjective or arbitrary. It rests upon something outside his mental processes. He derives it from the intrinsic relation which he supposes to exist between human actions and individual satisfaction. In his opinion, one's own pleasure is the supreme good, supreme end, which a person can rationally seek. The act in question gives him pleasure. Therefore, it is rational and morally good. Obviously the considerations which lead to this judgment are objective in a very important sense, even though they are not objective in the sense of agreeing with ethical reality.

The same statement is true of judgments which repose on any other theory of moral good. The most extreme form of intuitionism does not constitute an exception. A man may think that he has an immediate perception of all moral truths, whether through a special faculty called the moral sense, or through the general faculty of the intellect; nevertheless, his ethical judgments will not be purely subjective. His fundamental assumption is false, but he regards the moral good as objective and the moral aspect of acts as an objective relation. He does not hold that his intuition creates the moral quality of actions, any more than his senses create physical objects. He believes that acts are, respectively, good and bad because they agree or disagree with some objective standard of conduct. The method by which he arrives at ethical judgments is, indeed, too simple and too subjective, but the judgments themselves are assumed by him to rest ultimately upon an objective foundation.

If the intuitionist be incapable of objective judgments, so is the adherent of any and every other ethical system. At some stage of his reasoning every moralist necessarily falls back upon intuition. This is true even of the evolutionist and the utilitarian. They may protest against this imputation; they may protest that their system and method are uniquely scientific; and they may assert that they recognize no other basis for moral judgments than experience. Nevertheless, the basis always includes an intuitive premise. At most, experience can do no more than show that certain actions are conducive to social evolution or social utility. It cannot tell whether either of these is the supreme good, or whether conduct which promotes them is morally good. These assumptions are not susceptible of experimental demonstration. They are among those elementary propositions which are either self-evident or unconvincing. If I deny that the welfare of society is the norm and end of conduct — as a matter of fact, I do deny it — you do not profess to be able to prove it by experience. You can only reply that you are satisfied to take the proposition on faith, that it is a self-evident first principle which you grasp by immediate perception, by intuition. You may deplore my mental astigmatism or my moral obstinacy, but you cannot get out of experience the material necessary to demonstrate that social evolution or social utility is the end of human conduct. Experience can tell us what is, what has been, what is likely to be, but it yields no fundamental information on the question of what ought to be.

If the method of intuition deprive ethical judgments of objectivity, then all the judgments of all the moralists are without objective character. Particular judgments are as subjective as general judgments; for they all rest ultimately upon an intuitive assumption. To search for an objective basis of moral judgments is, in that hypothesis, to pursue an ethical will-o'-the-wisp.

Since this conclusion implies utter ethical skepticism and renders the discussion of our topic something like a solemn farce, I am going to assume that we are called upon for something more than such an elaboration of the obvious as I have been engaged upon for the last few minutes. I am going to assume that every theory of morals supposes a certain objectivity as a basis for moral judgments. Therefore, I am going to assume that I am expected to set forth what I conceive to be the true basis.

The true basis of ethical judgments is ascertained through an inquiry into the end or norm of conduct. The words "end or norm" denote a twofold manner of conceiving the fundamental ethical determinant. It may be stated as the end to which acts should be directed, or as the standard with which they should conform. In any particular ethical system, the two conceptions will lead to the same specific judgments. They merely present different relations of the same action. The one denotes conduciveness; the other, conformity. An act which conduces to the end will necessarily agree with the norm. In what follows I shall use both methods of defining the fundamental principle of morality, the true basis of objective ethical judgments.

All human acts are directed to some end. Hence any given act derives its primary meaning and character from the end which it promotes. No act will be good unless it aims at an end which is reasonable. What, then, is the supreme reasonable end? For answer we turn to the nature of man and his place in the universe. We can not find the answer in the nature and relations of some other kind of creature. Through an examination of his nature we realize that man seeks indefinite satisfaction, complete happiness. The human will has the capacity of desiring everything presented to it by the intellect as good. Now the intellect conceives good as unlimited in quantity, quality, and time. Its capacity to conceive good cannot be filled by any combination of things finite. Neither can man's desires be fully satisfied in this finite world.

This conclusion from man's psychological constitution is confirmed by abundant human experience. The incompetence of finite goods to make men happy has long been a commonplace in the literatures of all peoples.

Since the universe, including man, was created by an infinitely wise, good, and truthful God, this condition of perfect human happiness must somewhere be attainable. Since it is not to be found in this world, it must exist in the world beyond the grave. Since it comprises all conceivable good and perfection, it can be nothing less than some kind of association with God Himself. Hence the ultimate end of human conduct is union with God in eternity.

Acceptance of this truth does not, however, provide us with an adequate *criterion* of morality, an adequate guide to right ethical judgments. We may know the end and yet be ignorant of the way. The consciousness that we are obliged to fit ourselves for union with God in another life does, indeed, show us that blasphemy, for example, is wrong, but it does not clearly and immediately justify the same verdict upon unchastity, uncharity, and injustice. In order to obtain a complete criterion of the morality of actions we are compelled to examine man's nature from another point of view than that of its ultimate end. We turn to the concept of norm.

In a physical sense, man's nature is the necessary norm of his acts. Even the most injurious and detestable of man's deeds are in physical conformity with his nature. Every human act responds to some natural desire, is the expression of some natural capacity. If human nature in this physical sense were the standard of conduct, it would justify every sort of action and implicitly deny the reality of moral distinctions and moral judgments.

Analyzing man's nature a little deeper, we find that acts which are generally pronounced bad, although they conform with human nature in the narrow physical sense just described, are in conflict with other elements of human nature; for example, the habitual use of narcotics, numerous other practices which are injurious to health, and those acts of sensual indulgence which cause intellectual degeneration. In other words, the exercise of some faculties in some circumstances interferes with the exercise of other faculties. Yet both sets of faculties are constituent elements of human nature and have valid claims to consideration.

The difficulty can be solved only by assuming a certain order, or hierarchy, among the faculties. Some faculties must be subordinated to others, and every faculty must be exercised consistently with the welfare of the whole man. Accordingly, the norm of conduct and the true basis of moral judgments may be formulated thus: rational nature adequately considered; that is, in its *constitution* and *essential relations*.

Examining man's *constitution*, we find that the rational part is intrinsically higher than the animal part. The latter is merely an instrument. Its value is determined by its utility for the rational part and for the whole. In case of conflict between the rational faculties and the sense faculties, the former must be preferred. The sense faculties must be exercised in such a way as not to hinder the exercise and development of the rational faculties. From this principle we derive our moral condemnation of such acts as drunkenness and solitary unchastity.

The essential relations of rational nature are threefold: to a higher Being, to lower beings, and to equals. The first relation requires recognition, obedience, and worship rendered to God. The second authorizes man to use the lower creatures, animals, plants, and minerals, as mere instruments for his own welfare. The third relation connects the individual with his fellow men. It requires him to treat them as equals, as having the same intrinsic worth, the same nature, the same needs, and the same rights. They are always to be regarded as ends in themselves, never as mere instruments. From this relation follow the duties of charity, justice, veracity, and all the virtues that are required by the various forms of human association.

With regard to the implications of the principle of equality for organized groups, I shall notice only one social organization. Since the State is in accord with and required by rational nature, it has a moral claim upon the loyalty and support of its members. But it is not an end in itself. It is but a means to the welfare of individuals. In times of grave danger to the community, it may properly require grave sacrifices from its members, but it may never use any of them as mere means to its assumed welfare. If it did so it would subordinate intrinsically sacred beings either to a mere abstraction or to a part, albeit a majority, of its members. The latter have no greater intrinsic worth than the persons whose rights have been ignored.

Thus conceived, rational nature constitutes a reasonable norm of conduct and a reasonable basis of objective moral judgments. It is consistent with all genuine human needs and human development. To be sure, it does not ensure uniform judgments on all the details of conduct. Some of the world's ablest thinkers have accepted this norm of conduct and the general principles which it involves, and yet have disagreed on many questions of practical application. However, this limitation affects every ethical system and, indeed, every practical science: witness the disagreements among authorities in medicine, economics, and politics.

The authority of rational nature may also be described in terms of teleology. Morally good acts may be defined as those which further the end to which rational nature tends; namely, the development and perfection of personality. This is the *proximate* end. Since it is morally good, morally obligatory, and supremely reasonable, it is obviously in harmony with and conducive to the *ultimate* end; namely, cognitive and affective possession of God in eternity. If this agreement did not exist, God would have contradicted Himself; for He would have provided an ultimate end which demanded a different line of conduct from that required by the equally obligatory proximate end. This contradiction is unthinkable in an all-wise Creator. Hence the fundamental principle of morality, the true basis of ethical judgments, may be stated either as end or as norm; the end and the norm are necessarily correlative, and the particular judgments which they dictate are necessarily identical.

Space is wanting for a formal and comprehensive consideration of the objections that may be brought against the principle of rational nature, as defined in the foregoing paragraphs. Nevertheless, I cannot close without noticing briefly two fundamental difficulties. The first is that the propositions concerning the intrinsic supremacy of the rational faculties, the intrinsic sacredness of personality, and the intrinsic equality of all human persons, are incapable of demonstration. They are all assumptions, or at best, intuitions. Very true, but they are intuitions which reflect the mind of God. The absolute character which we attribute to these fundamental intuitions, the absolute character which men have always attributed to the moral law and moral obligation, can be explained only on the theory that they express the decrees of the Creator. You may call this a mere hypothesis, but it is the only explanation which fits the facts of the moral life, the only explanation which makes intelligible the unique

character of absoluteness and moral compulsion which the human race has everywhere attached to the fundamental perceptions and principles of morality.

The second objection contends that man's nature cannot provide an enduring objective basis of moral judgments, since man himself is subject to continuous evolution and change. To this a sufficient reply is that when man becomes converted into an essentially different creature, for example, an angel or a gorilla, his new nature will require an essentially different set of moral rules. Until that happens, rational nature will continue to be the same satisfactory norm of conduct that it has been throughout all recorded history everywhere. To be sure, its application will continue to require that account be taken of the varying circumstances of human life and development. In its main outlines, however, this moral system will fit the needs of the man of tomorrow as well as the man of today and yesterday.

LE FONDEMENT OBJECTIF DES JUGEMENTS MORAUX

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I

Y a-t-il une base objective des jugements moraux? Personne, je crois, ne serait disposé à le contester. On différera d'opinion sur le point de savoir quelle est cette base objective, mais on sera d'accord pour affirmer qu'il y en a une. S'il n'en était pas ainsi, il faudrait admettre que des jugements moraux différents concernant le même acte seraient également justes et légitimes, que la même action pourrait, avec autant de raison, être louée et admirée par l'un, blâmée et condamnée par l'autre, — de même que quelqu'un peut être ravi d'un morceau de musique ou d'une peinture qu'un autre trouve affreux ou insignifiants. Or nous tolérons très bien ce désaccord quand il s'agit d'oeuvres d'art, et le proverbe dit que "des goûts il ne faut pas discuter." Mais dès qu'il s'agit d'actes ou de sentiments de quelque importance, nous ne souffrons pas que l'on juge moralement d'une autre façon que nous. Car, dans notre pensée, ce n'est pas nous, individus, qui jugeons. Nous ne faisons qu'exprimer le jugement qui est porté au nom d'une règle ou d'une loi.

Ce terme de "loi morale" souvent employé quand on veut faire ressortir l'objectivité des jugements moraux, éveille aussitôt l'idée voisine de "loi naturelle," et l'on peut se demander en quoi ces deux sortes de lois se ressemblent ou diffèrent l'une de l'autre, et quelle est la nature particulière de l'objectivité propre à chacune. Wundt a fait remarquer, avec raison, que l'idée de loi naturelle, en tant que désignant simplement les rapports nécessaires entre les phénomènes, ne remonte guère au delà du XVII^{e} siècle. Auparavant l'idée de loi, même celle de loi naturelle, semble avoir impliqué plus ou moins distinctement l'idée d'une intelligence et d'une volonté législatrices. Cette conception, profondément modifiée, il est vrai, par l'attitude critique, se retrouve encore chez Kant. La raison autonome, selon lui, est législatrice du point de vue théorique, en tant qu'elle se manifeste par les catégories et les principes. Elle est législatrice aussi du point de vue pratique en tant qu'elle se donne à elle-même la loi de son activité sous la forme de l'impératif catégorique.

Ainsi objectivité veut dire loi, loi veut dire ordre, commandement. Nos jugements moraux impliquent que dans un cas donné il faut agir d'une certaine façon, et d'une façon différente dans un autre cas. Il se peut que, comme Kant le soutient, nous nous sentions à la fois législateurs et sujet, et que notre raison se dicte à elle-même la loi à laquelle elle se reconnaît obligée d'obéir. Ce qui est certain, c'est que le devoir s'impose à nous, Kantiens ou non-Kantiens, que nous nous sentons intimement tenus d'y obéir, et que nos jugements moraux, tant sur nous-mêmes, et sur nos actes, que sur ceux des autres, impliquent l'existence de règles valables pour tous, c'est à dire de lois — donc d'une base objective de ces jugements.

II

Cette base objective, Kant la trouvait dans l'autonomie de la raison pratique. Sa démonstration n'a pas eu la force de s'imposer. Pour la considérer comme valable, il faut accepter aussi sa théorie de la liberté de l'homme, les postulats de la raison pratique, c'est à dire sa métaphysique, sa philosophie de la religion, bref, tout l'ensemble des *Critiques*. Personne n'est Kantien aujourd'hui jusqu'à ce point. Kant lui-même, s'il revenait au monde de notre temps, ne le serait sans doute pas non plus. Nous adresserons-nous à une autre doctrine philosophique? Nous aurons l'embarras du choix. Préférerons-nous les solutions antiques du problème, ou les modernes? Celles d'Aristote, des Epicuriens ou des Stoïciens, ou bien celles qui depuis la Renaissance, ont cru trouver la base objective des jugements moraux dans la raison, ou dans le sentiment moral, ou dans l'intérêt général, ou dans la volonté divine, etc. ? Chacun de ces systèmes a trouvé faveur à un certain moment, a été soutenu par des esprits de haute valeur, et s'est appuyé sur des arguments qui faisaient impression. Pourtant aucun d' eux n'a pu se maintenir à l'exclusion des autres. Il n'en est aucun dont on puisse dire qu'il a conquis un assentiment unanime, qu'il est définitivement établi, et qu'il sert désormais de point de départ incontesté aux recherches ultérieures. La discussion continue, aussi vive que jamais, entre les écoles rivales. Chacune se croit le droit de prétendre à la place encore libre de système universellement accepté. Chacune, en fait, est redoutable aux autres dans sa partie critique, dans ce que Bacon appelait "pars destruens." Elle sait démolir les systèmes adverses, et trouver les points faibles de leurs démonstrations. Elle leur porte des coups qu'ils ne peuvent pas parer. Mais ils lui rendent la pareille, car dans sa partie positive "pars aedificans," elle n'est pas moins vulnérable que les autres. Pour se convaincre que tel est bien, aujourd'hui même, l'état des choses, il suffit de jeter les yeux sur les sommaires des revues philosophiques, ou de consulter les catalogues des éditeurs qui publient des livres de philosophie morale. Vous y verrez les questions fondamentales de l'éthique, et en particulier, la question de la base objective des jugements moraux, reprises indéfiniment, et traitées comme si, de l'aveu unanime de ceux qui s'y intéressent, loin d'avoir reçu une solution définitive, elles étaient encore entières.

III

La constatation de cet état de fait indéniable m'a conduit, il y a plus de vingt ans, à des réflexions sur les rapports de la théorie et de la pratique en morale, que j'ai soumises au public dans l'ouvrage intitulé *La Morale et la Science des Moeurs*. Je m'y suis posé, entre autres, la question suivante: comment se fait-il que des philosophes, partisans de doctrines morales nettement opposées les unes aux autres, les uns Kantiens, d'autres fondant la morale sur les sentiments altruistes, ou sur l'idée rationnelle d'ordre, ou sur l'intérêt, etc., se retrouvent presque toujours d'accord entre eux dans leurs jugements moraux personnels, et qu'ils soient à peu près unanimes dans leur façon de distribuer le blâme et l'éloge lorsqu'il s'agit des actes de leurs voisins, ou même des leurs ? Cette concordance constante, et, à vrai dire, obligatoire, dans une société donnée, ou du moins dans une classe donnée de cette société, entre les jugements moraux de tous les individus, et des philosophes comme des autres, n'implique-t-elle pas à la fois, et que ces jugements ont une base objective, et que cette base ne se trouve pas établie dans les systèmes de morale qui plaident pour celle-ci ou pour celle-là ?

Cherchons donc par une autre voie, et laissons nous guider par les faits. Si, dans une société donnée, que ce soit une société dite primitive, la société grecque, chinoise . . . ou la nôtre, il n'y a en général aucun doute sur la conduite qu'un individu doit tenir dans une conjoncture donnée, et si les jugements moraux reflètent unanimement cette certitude, n'est-ce pas parce que les représentations collectives qui dominent dans cette société imposent cette manière d'agir, et, par suite, inspirent ces jugements ?

Durkheim a bien fait voir que certaines de ces représentations collectives, précisément celles qui se rapportent à la conduite morale, ont un caractère impératif, et, selon sa propre expression, exercent une contrainte. Celle-ci se traduit dans la conscience de l'individu, par le sentiment du devoir à remplir, par le remords et l'attente d'un châtiment mérité quand il a manqué à ce devoir, et par la réprobation à l'égard de ceux qui ne se conforment pas à la conduite prescrite. Je ne crois pas nécessaire d'insister sur cette théorie de Durkheim, qui est bien connue. Il admet l'exactitude de la description que Kant a faite de la conscience morale, et l'on peut dire, sans exagération, que sa doctrine a souvent un accent Kantien. Mais c'est à des causes sociales qu'il ramène les faits décrits.

Ces faits moraux sont ainsi des faits sociaux d'une certaine sorte que Durkheim s'est efforcé de définir, non moins complexes que les autres, et, si paradoxal que cela semble d'abord, aussi peu connus de nous, au sens scientifique du mot, bien qu'ils paraissent être des produits de notre activité volontaire. Il ne suffit pas, en effet, qu'une réalité nous soit familière pour qu'elle nous soit exactement connue, pour que nous en apercevions distinctement la structure, et comment les causes et les effets s'y conditionnent. Par exemple, on peut posséder une langue, en manier aisément les ressources et les finesses, — comme nous faison tous pour notre langue maternelle, — et cependant ne rien savoir de cette langue au point de vue linguistique. Les "primitifs" qui parlent parfois des langues d'une richesse et d'une complexité merveilleuses, n'ont pas l'idée de ce que c'est qu'un mot, et n'ont jamais analysé une phrase. Pareillement une réalité morale vit dans nos consciences, qui contribuent même parfois à la modifier un peu. Nous la sentons en nous, nous nous jugeons tenus de nous y conformer, nous y trouvons une source toujours vive de joies et de peines. Rien ne nous est plus intime. Et cependant, du point de vue de la science, avant l'analyse sociologique,

nous ne connaissons pas cette réalité, de même que les grecs, avant les travaux des sophistes, ignoraient la grammaire.

La tâche prochaine est donc de travailler à cette analyse sociologique des faits moraux, à cette "science des moeurs," dont j'ai essayé de définir avec quelque précision l'objet et les applications futures, dans le livre que j'ai pris la liberté de rappeler tout à l'heure. Sans y revenir ici, j'en indiquerai d'un mot les limites. Cette science positive des moeurs n'a pas la prétention de nier ou d'exclure ce qui n'appartient pas à son domaine. De même que la physique n'est nullement un obstacle à la spéculation métaphysique, dont l'objet et la méthode sont tout autres que les siens, de même la science des moeurs ne tend aucunement à faire disparaître la spéculation sur l'idéal moral, ni l'analyse psychologique de la vie intérieure, telle que les moralistes l'ont pratiquée de tout temps. Quelle place elle occupera elle-même, l'avenir seul le montrera. L'arbre sera jugé à ses fruits.

THE BASIS OF OBJECTIVE JUDGMENTS IN ETHICS

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IN this title I find two preliminary difficulties: (1) what is meant by the *basis* of a judgment, and (2) what is meant by the implied distinction between objective and subjective judgments?

(1) By the basis of a judgment might be meant the psychological causes (e.g., prejudices, hopes, fears) that lead us to form a judgment. To discover what these are forms an interesting problem, but not (I think) a very important one. For, to say that a judgment is due to causes is to imply that it is not based on reasons, and so far as this is the case we have no ground for believing it to be true. The question we are meant to discuss must be the question of the *logical* basis of our judgments, or in other words the question, What are the facts which make them true, when they are true? Now this seems to mean two different things according as the judgment in question is a direct or an inferential one. In the latter case the basis of the judgment naturally means the premiss or premisses on which it rests. In the former case it cannot mean this, and can, I think, mean nothing but the *fact* expressed in the judgment. In the *former* case, again, the question "what is the basis of such and such a judgment?" (the question implied in our title) is unmeaning. If the

judgment has a basis at all, i.e., if it is expressive of a fact, the basis can only be the fact already expressed in the judgment. The real question, then, about a judgment not reached by inference is not "what is its basis?" but "has it a basis?", i.e., "does it express a fact?", or in other words, "is it true?". In the *latter* case the question, "what is its basis?" is a significant question, since it may not be clear what the premisses are that warrant a given inferential judgment. In the case of judgments put forward as direct we have only to ask "have they a basis?"; in the case of inferential judgments we have to ask both "have they a basis?", and "if so, what is it?", — but the first question cannot be answered without answering the second. We can discover that the judgment has a basis only by discovering what the basis is. But first of all, since it is not always clear whether our judgments are direct or inferential, we must ask which they are.

(2) The distinction drawn between objective and subjective judgments is a puzzling one. The possible meanings of "objective" that occur to me are (a) "believed to be true-independently-of-their-being-judged." But in this sense all ethical judgments, and all judgments whatsoever, are objective. This meaning, then, will not serve for a division of judgments into objective and subjective. (b) "Actually true independently of being judged." Now what is true must *necessarily* be true independently of being judged. In this sense, therefore, the distinction between objective and subjective judgments will simply be that between true and false judgments. To say that our predications of "good," for instance, may be true but not in this sense objective, is to say that good = thought good by a mind. But this is a circular definition which leads at once to a vicious infinite regress; and it may further be refuted by the following consideration. We could suppose, say, an act of self-denial which neither the doer nor anyone else had ever pronounced good. If now some mind became aware of it, it might pronounce that the act had been good even when it was not being thought so. Its goodness, then, cannot be equated with being thought good by a mind. Shall we say, then, that good means "such as to be thought good *when* attended to by a mind"? That this will not do is made clear by asking whether the thought in question is true or false. That which is falsely thought good when attended to is not good. And if we say to be good = to be such as to be truly thought good when attended to, that implies that the thing in question really is good apart from being attended to. (c) "True independently of any psychological effect produced by the subject of the judgment

on the judge." It is, I think, mainly in this sense that doubt is felt as to whether any of our predications of "good" or of "right" are objectively true. When, for instance, it is said that our predications of "good" are merely subjective, it is usually meant that "good" means simply "pleasant" or "desired" or "approved" or "tending to satisfy desire" or, in general, "producing a certain psychological effect on the judger."

The questions that emerge, then, are the following: —

(1) Are there such things as goodness and badness, rightness and wrongness, independently of any psychological effect produced by their subjects on the judger?

(2) If there are, can we discover what subjects they belong to?

(3) Are the judgments in which we predicate them direct or inferential, or some the one, some the other?

(4) If any are inferential, what are their premisses?

(1) We have to ask, then, whether good means "producing a certain kind of experience in a mind"? This may be subdivided into two main possibilities. (a) Good might mean "thought good by a mind." This suggestion I have already dealt with. (b) The only other way in which we might say "good = such as to produce a certain effect on a mind" is to say "good = such as to produce a certain state of *feeling* in a mind." This has been, perhaps, the commonest way of trying to make good in this sense subjective; witness the many attempts to equate "good" with "pleasant" or "desired." This attempt is not open to the same objection as the last, since the antithesis of true and false does not apply to feelings. I discard "pleasant" and "desired" as quite obviously not co-extensive with "good," let alone identical with it. The most natural name to give to the feeling, the tendency to produce which is to be identified with good, is "the feeling of approval." But when I try to analyze what may loosely be called by this name, I can find nothing in it but the thought that the thing approved is good, a feeling of pleasure in contemplating it. So that to say "good = such as to rouse approval when attended to" means "good = such as to rouse the thought that it is good, a certain pleasure, when attended to"; and we can see the unsatisfactoriness of this by once more asking whether the thought is true or false. That which is falsely thought good and gives pleasure is not good. And if good = such as to be truly thought good and to give pleasure, that implies that the thing called good is good apart from being thought good and, therefore, apart from rousing approval.

Does "S is good" mean, then, that some other relation exists between S and me, e.g., that S is desired by me, or pleases me, or fulfills my desire? Of all such suggestions far the most plausible, to my mind, is the last. If even this can be seen to be untrue, I may perhaps be excused for not discussing the others. To this suggestion there are at least two objections. (a) We often experience pleasures (e.g., that of smelling a sweet-scented flower) which we have not desired. That they tend to satisfy desire could, I think, be known only by first desiring them and then finding that when we get them they satisfy our desire. But in fact we judge them to be good without having desired them at all. (b) It seems to be characteristic of *all* objects of desire that they tend to satisfy the desire for *them.* If a man desires revenge, this desire is satisfied when he takes his revenge. Yet we do not judge revenge to be good, but to be bad. "Yes," it may be said, "but revenge does not permanently, or completely, satisfy." It certainly does not satisfy our desire for things other than revenge. But if we interpret "tending to satisfy desire" not as "tending to satisfy the desire for itself" but as "tending to satisfy desire in general," no particular thing will be good, since no particular thing tends to satisfy all our desires. Only the sum of all objects of desire would then be good. But in fact we judge particular things to be good-virtue though it does not always or completely satisfy desire for pleasure, and pleasure though it does not satisfy desire for virtue. If "tending to satisfy desire" = "good," then if we take tendency to satisfy desire in the one sense many things will be good which in fact we judge to be bad, and if we take it in the other sense no particular thing will be good at all. If we had only our predications of "better" and "worse" to take account of, this objection would perhaps not arise. We might argue, as many philosophers have done, that virtue satisfies other desires than the desire for virtue itself, while pleasure satisfies no desire but the desire for itself, and often hinders the satisfaction of desires for such things as virtue and knowledge; we might thus explain our judgment that virtue is better than pleasure, consistently with this definition of good. But this would involve treating goodness and badness as forming (like heat and cold) a continuous series in which only an arbitrary line can be drawn between them; while in fact we cannot help thinking of some things as definitely good and others as definitely bad.

It would seem, then, that tendency to satisfy desire is not co-extensive with good; and, therefore, *a fortiori* it cannot be the meaning of good. Yet this is the most plausible of all attempts to make goodness identical with some psychological relation between an experience and its experiencer. It would seem to follow that goodness is even in this sense objective. I conclude, then, that good does not mean "such as to arouse some experience in a mind." Yet I have the conviction that apart from mind there is no such thing as good or value. The only possible conclusion is that good is a characteristic only of minds and states of mind. Now we undoubtedly apply the name good to many other things. A thing of any kind may be good in the sense of being good of its kind — a work of art, a machine, etc. I must, therefore, explain that my remarks about good apply only to good in the sense of "good in itself, apart from any consequences or any use to which the thing in question may be put." And in this sense we do not, I think, say of a work of art or a machine that it is good. A work of art is good because it arouses a certain experience in a competent observer, a machine because we can make a certain use of it. In point of fact the only things we do think good in themselves are states or qualities of mind. Of a noble act I can say that it is good whatever may happen in consequence of it; and I can say the same, I think, of a pleasant experience as such, and of an intellectual achievement as such. I conclude, then, that good is objective in the sense of being independent of being attended to and of rousing any sort of experience in a mind, but not independent of mind since it belongs only to minds and to their states and qualities.

(2) We have next to ask the question whether we are ever able to discover what things are good. I must start by assuming, what I cannot doubt, that the mind is competent, when rightly used, to know in part the nature of reality. I claim to know that this is so, and if anyone is inclined to resist the claim, I must, nevertheless, ask him to allow me to make it. For unless we make this claim we can certainly not discuss philosophy nor anything else, since whenever we say anything we claim to be saying something that is true of reality.

Now I seem to know, as certainly as I know anything, that such things as virtue, insight, and pleasure are good. To the assertion that virtue is good it might properly be objected that it is tautological, since by virtue we mean only a *good* state of character. But the same objection cannot be made to the statement that insight and pleasure are good. And the statement that virtue is good is only a brief way of saying that certain kinds of character or of motive — such as conscientiousness, courage, benevolence — which are not good by definition, yet are good. The great authority of Kant, no doubt, stands against the claim that any motive other than conscientiousness is good; but the mass of competent opinion asserts that benevolence and courage, for example, are good; and perhaps *no one* doubts that conscientiousness is good. Again, many doubt whether knowledge is in all cases good; the value of knowledge of unrelated matters of fact must in any case be small. But probably no one doubts that insight into the reasons and causes of things is good. And though we may think some pleasant states of consciousness bad on the whole, we judge their badness to spring from some element in them other than their pleasantness, and our whole attitude to such things as kindness, cruelty, and reward implies that we think pleasure in itself good. When we seem, after full consideration, to detect goodness in something, the only check we can reasonably be asked to impose on ourselves is that of inquiring whether others have an opposite opinion, or no opinion, on the matter. And I believe that as regards the three states of mind I have named, the opinion expressed survives this test with very considerable success. Virtue, insight, pleasure — these are the things one or more of which have been selected as the good by the main schools of ethical thought, and it may well be the case that all have been right in what they asserted and wrong in what they denied.

(3) We have next to inquire whether our predications of good are direct or inferential. Obviously none of them can be justified by inference unless there is some characteristic such that *all* the things possessing it are good. Now the attempts to state such a characteristic have, so far as I can recollect, all been attempts to find some psychological effect on the mind, production of which is co-extensive with goodness. These have usually tried to show that the characteristic in question is identical with goodness, and when they have taken this form they would not, even if successful, have shown our predications of good to be inferential. For if X = good, we do not infer the goodness of S from seeing it to be X, because to be X and to be good are the same thing. If, however, X and good are co-extensive without being identical, our predication of good might be inferred from the predication of X. If my previous contentions were right, however, none of the characteristics put forward as identical with good is even co-extensive with it, and in view of the failure of all such attempts hitherto we are perhaps justified in thinking that no such attempt is likely to be successful.

(4) If predications of good are inferential, then, it would seem that they must rest on no *single* middle term. I have ventured to

suggest that "virtuous," "intelligent," "pleasant" are three different characteristics each of which implies the goodness of anything of which it can be predicated. We may say benevolence (or a particular instance of benevolence) is good because it is a species or instance of virtue; the knowledge of geometry (or a particular state of such knowledge) is good because it is a species or instance of insight; the pleasure of playing games (or a particular instance of it) is good because it is a species or instance of pleasure. But I doubt if these can be called real inferences. For to be a species or instance of virtue, insight, or pleasure is not a mere attribute of such a species or instance; it is its whole nature. To say that the insight into geometrical truth is a form of insight or that the pleasure of playing games is a form of pleasure is a mere tautology and not a judgment at all; and if so, it cannot serve as the premiss of a syllogism.

Again if we take some complex state of mind, such as love (a peculiar complex of benevolence, pleasure, and insight) or the aesthetic experience (a peculiar complex of pleasure and insight), can we say, supposing my analysis of them is right, that their goodness can be inferred from the goodness of their components? It might appear that we can. The analysis of them into their components is not a tautology. It may be disputed, and it may very likely be wrong. But if right, it might seem to afford a sufficient premiss for judging love and the aesthetic experience to be good. It might be objected that what Prof. G. E. Moore calls the principle of organic unities forbids us to infer the goodness of a complex from the goodness of its elements. But I can, at any rate, think of no complex that is bad though *all* its elements are good. Still the mere fact that I admit the necessity of looking to see if there are instances to the contrary shows that I do not see the inference to be necessarily true. And in any case, even if it *could* be inferred that love or the aesthetic experience is good, I feel sure that our judgment that they are so is intuitive; that something can be inferred does not prove that it cannot be seen intuitively.

When we are judging of complexes which contain both good and bad elements, our judgments are more doubtful. It seems clear here that we cannot infer the goodness or badness of the whole from that of the components. What happens here, it seems to me, is that in doubtful cases we first let our mind dwell on the elements. We realize as clearly as possible their nature and their degree of goodness or badness, and then pronounce a judgment on the whole which is neither logically inferred from our judgments on the parts nor self-evident. I think, in fact, that our judgments in such a case are always opinion and never knowledge.

It would appear, then, that the only predications of good that are inferential are those in which we are not predicating goodness-in-itself but goodness-as-a-means.[1]

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[1] A section on predications of "right" or "my duty" is suppressed owing to considerations of space.

THE BASIS OF OBJECTIVE JUDGMENTS IN A SUBJECTIVE ETHICS

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(*Wellesley*)

ACCORDING to the conventional view a subjective ethics has to do with such phenomena as conscience, remorse, and self-flagellation. An objective ethics, on the other hand, treats of customs and institutions, of labors, of blood money, of marriage rites, and the like: the two types of ethics are sharply offered; one must choose between them, one cannot have both. By the near-paradox of my title I have tried to indicate negatively my own sharp divergence from this ordinary point of view and positively my conviction that ethics though in one crucially important sense a subjective science none the less involves objective judgments. The justification of this position rests on the distinction to be made between radically different meanings of the correlated terms "objective" — "subjective" — words with which the metaphysicians always have played fast and loose.

For ethics, the significant uses of this pair of terms, subjective — objective, are clearly two.[1] According to one of these, the subjective is the "mental" and the objective the "non-mental." Feeling blame is, for example, subjective; inflicting a penalty is objective. In the other sense, the subjective is the individual, the objective the more-than-individual. (Lyric poetry, for instance, the outpouring of the single soul, is subjective; dramatic poetry, involving the interplay of minds, is objective.) The thesis of this paper is that ethics is from the first of these points of view a subjective, from the second, an objective science.

I. To begin with the subjective aspect: whether ethics be conceived as one division of the philosophy of mind or, on the other hand, as a psychological science — in either case, it is sharply contrasted with the physical, the predominantly logical, and the historical sciences and is conceived as dealing with mental phenomena. On this point there is wide agreement. Westermarck, for instance, flatly says: "If ethics is to be used as the name of a science, the object of that science can only be to study the moral consciousness as a fact."[2] Throughout his books he is true to this conception: though his pages are filled with accounts of customs of infanticide, of restriction of diet, of inheritance, and the like, he specifically advocates what he calls a "form of ethical subjectivism"[3] and looks upon customs and institutions as moral only as they are expressions of the moral consciousness.

To make good, within the limits of this paper, this conception of ethics as subjective demands a reference, brief as may be, to the three main types of ethical system. One of them is that of Hutcheson and Shaftesbury and, in our own day, that of Westermarck and Taylor, the theory that the moral experience consists in approval or disapproval. A second is the so-called rigoristic doctrine, best known in Kant's version of it, that the moral consciousness is the feeling of obligation. There is finally the voluntaristic conception of moral experience as willing the good. The first of these theories conceives an act as "good or bad as it is apt to give rise to an emotion of approval"[4] and regards morality as "simply a name for the fact of social approbation"; the second of them stresses the acknowledgment of obligation, of duty, the feeling "I ought" as distinctive of the moral life. According to the third view, the experiences just described, significant as they are, do not constitute the core, the essential of the moral experience which consists rather in willing the good.

It is beside the purpose of this paper to choose between these different conceptions. To the writer, indeed, it seems clear that approval and disapproval, though often companioning the distinctly moral experience, are not in themselves essentially moral; and it seems equally evident that obligation, though often a poignant part of the moral consciousness, does not of necessity and invariably belong to it. Rather, the obligation consciousness always terminates in the truly basal moral experience, that is, one ought to will the good; and similarly, approval is moral only when directed in the same fashion, that is, one *morally* approves not the beautiful, nor the true, nor the agreeable, but the good. But once more, this comparison of these theories is not the matter at issue. The point to be stressed is that any one of these three main types of ethical doctrine is an unambiguously psychological or subjective conception. So far as the first two of them are concerned, this need hardly be argued. Approving or disapproving and feeling obligation — these are certainly forms of consciousness. The science which deals with either experience is obviously a psychological, a subjective, science. In parallel fashion, it may be argued, ethics as study of selves in their willing of the good or the bad is also a psychological, and thus a subjective, science. We are moral persons, according to this third theory, not in that we approve or disapprove this or that, not even in so far as we have twinges of conscience or a feeling of duty — in a word, we are moral not by virtue of any affective experience whatever, but simply in so far as we are willing, volitional, affirming selves. Volition, or will, is to be sure, not always a moral experience. When, for example, we choose between Clicquot Club and Canada Dry Ginger Ale, or between swimming and tennis, we are presumably not willing morally at all. The difference between moral and non-moral willing consists in truth not at all in the specific *quality* but solely in the distinctive *object* of the moral will. For the moment, we must content ourselves with the mere verbal indication of the nature of this characteristically moral object. In one's non-moral willing one seeks *a* good, a value; in one's moral willing one seeks *the* good or that which leads to the good.

Our conclusions to this point may accordingly be summarized somewhat as follows: Ethics is a subjective science which studies selves as moral or else the moral experience. To be moral means essentially to will the good.

It will not have escaped the notice of the critic that the conception of ethics, thus attained, is extraordinarily precarious. For the crucially important term, *the good*, in which this conception terminates, has been left in the air, completely undefined. But everybody knows that an objection to this doctrine, that ethics is a subjective science, rests precisely on the allegedly non-mental nature of the good. Agreeing that "goodness is the distinctively ethical conception," G. E. Moore conceives it as "an indefinable quality which attaches to things independently of consciousness."[5] . . . "Good is good," he says, "and that is an end of the matter. . . . Propositions about the good are synthetic and never analytic. . . . Good is a simple notion just as 'yellow' is a simple notion; [and] just as you cannot . . . explain to anyone who does not already know it what yellow is, so you cannot explain what good is."[6] If Moore can justify this assertion it is evident that one theory, at least, of ethics as subjective must be yielded. For it has already been admitted that moral willing is distinguished from volition of the non-moral type solely by its object; and if this object, goodness or the good, is an indefinable and absolute character attaching to things independently of consciousness, ethics becomes by this fact an objective or, at the least, a non-subjective science.

But against this conclusion, it must be urged that Moore's conception of the good high-handedly sets aside a more immediately persuasive and more widely held doctrine. This is the Aristotelian conception of the good simply as self-sufficient, ultimate object of will — *ὅ δι' αὑτὸ βουλόμεθα, τἄλλα δέ, διὰ τοῦτο*. This conception is in incontrovertibly subjective terms. So far from distinguishing the *moral* will by the absolute, non-mental, indefinable character of its object, it distinguishes the moral object by the ultimacy of the will. More definitely: Aristotle and the overwhelming number of moralists who tacitly or overtly agree with him define the good as a supreme form of what is willed, instead of defining moral will as will directed toward a unique (and non-mental) somewhat — the good. In Spinoza's phrase: "We deem a thing good because we strive for, will, desire, or long for it."[7] In opposition to this doctrine of the good as supreme object of will, Moore in the end offers nothing save the dogmatic assertion that the good is an indefinable non-mental character. For the specific arguments on which he rests his case consist entirely in his spirited demonstration, against hedonists, utilitarians, and others, that the fundamental meaning of goodness may not be identified with any particular conception of goodness — hedonistic or anti-hedonistic, egoistic, altruistic, or universalistic. In this insistence Moore is unquestionably right. But by showing that goodness does not mean agreeableness, or benevolence, Moore falls far short of proving that the good is indefinable. But on the contrary he himself implicitly — never, of course, explicitly — adopts the Aristotelian view in his emphasized doctrine that good things are, as a matter of fact, desired just as true things are known and even in his proviso that goodness is "an indefinable character of *willed* objects."[8]

II. This paper set out with the statement of a twofold purpose: to show that ethics is subjective in the sense of dealing with mental reality, and to show also that ethics is objective in the sense that it does not concern itself with the merely individual experience. The execution of the first of these purposes has resulted in a hurried sketch of ethics as a psychological science dealing with the self as it wills the good and defining the good as object of ultimate volition, or end-in-itself. This conclusion, however, seems at a stroke to cut us off from the possibility of attaining our second purpose; in a word, it seems to exclude all chance of objective ethical judgments and to foredoom ethics to complete subjectivity. For the only way of finding out what actually is the good, the ultimately willed, is by introspection in one's own case, and by acceptance in the case of others of their reported introspection. Now the good, thus described, is obviously individual; it is *my* good, *your* good, Epicurus's good, John Stuart Mill's good. As individuals differ from each other, so what they severally regard as self-sufficient objects of will, as purposes which demand no justification, must differ. By one man pleasure, by another self-development, by a third obedience to God, is willed for itself alone; and similarly, one man in his supreme volition considers himself only, another austerely excludes himself from consideration, while a third refuses to shut out any sentient being from the realm of the good. Yet all these different persons, with their widely divergent conceptions of the good, are positively moral in so far as each affirms by his will what he regards as ultimate, self-explanatory purpose to which all other volitions are subordinate. In a word, on this theory, each individual moral agent certainly conceives the ultimate object of his will in his own terms.

There is no avoiding, from the standpoint of this paper, the conclusions of the last paragraphs. None the less it is still possible and, indeed, important to maintain that ethics is, in the present sense of the terms, an objective as well as a subjective science. And this for at least two reasons. (i) Objective judgments are involved, in the first place, in the moral self's attainment of his conception of the chief good. For the good, just because it is ultimate, supreme object, to which other purposes are subordinated, is an object *chosen* from among others. The choice, it is true, may be made early in life, it may or may not later be reaffirmed, and the fact of making it may even be forgotten. Again, this choice may be either a carefully reasoned or a relatively immediate choice; but comparison between alternatives, thought in some form, is essential not merely to the practice of the virtues, the adjustments for moral ends of our conflicting tendencies and urges, but to the bare possession of the one essential to the moral life, an ultimate purpose directed to the good. Now thought, especially in the forms of comparison, deliberation, and reasoning, is a social — and thus an objective — experience in that it involves reference to other selves. A literally isolated self might, it is true, conceivably compare and reason on his solitary experiences. But there *is* no literally isolated self; and no human being can be imagined as reflecting, however vaguely, on contrasted values, or objects of will, without reference to the purposes of his fellow-men — his colleagues, his rivals, his friends, his family. Such social reference is objective. In the words of Warner Fite, we have the "experience of objectivity when we think our thoughts in the light of (not in conformity with) the thoughts of other persons. . . . Objective decisions are decisions reached after criticism. And as thus objective . . . morality is in the true sense 'social'"[9]

(ii) A psychologically subjective ethics involves also a second sort of objective judgments. These are the judgments no longer of the moral self in reaching his conception of the good (nor in selecting means to attain it); they are the valuing, estimating judgments of the moralist, who compares different individual moral conceptions. It may be objected that subjective ethics has no place for a moralist with his estimates of conceptions of the good, since the good, defined as "that which is willed for itself alone," means precisely that which cannot be compared — anybody, the objecter urges, whose conception of the good is challenged, may retort: Before I achieved an ultimate purpose, I perhaps compared conceptions of the good. But I have now made my choice. And to defend my conception, to give reasons why I hold pleasure (for example) as the good, would be to admit that I do not will it for itself. The fact that I do affirm precisely this, in my ultimate willing, is sufficient to constitute it *my good.*

Once more, there is no disputing the facts from which this criticism issues. From the standpoint of a psychological or subjective ethics it is in the nature of the case impossible to challenge anyone's conception of the good, to force him to give reasons for it. But there is a difference between the criticism and the challenge of a conception of the good; and the right of criticism must be insisted on. In its strictly psychological capacity, or function, the task of ethics is completed when it has fully probed the moral experience of the individual self. But ethics is a normative as well as a descriptive science, for it compares and evaluates the different types of conception of the moral life — in particular the different forms of conception of the good. Such comparison and estimate, wholly incompatible with an exclusive concern for any one individual conception, constitute ethics an objective science. The judgments in which such comparisons terminate are truly objective judgments.

(iii) There is little need to point out finally that every form of universalistic ethics is, in this sense, objective. When G. E. Moore, for instance, describes the good, qualitatively considered as "that state . . . which contains the greatest number of characters having positive value . . . provided that the presence of none of these characters seems *to diminish the* value of the whole,"[10] he virtually conceives the good not in terms of any one man's ideal but as endowed with the positive characters of the objects affirmed by all wills. The universalistic reconciliation between egoist and altruist illustrates the same point. Why narrow your conception of the supreme end to yourself, a mere needle point in the universe? is the critic's challenge to the egoist. Why ignore yourself though you too are real, though you too have value? is the egoist's counter criticism of the altruist. Neither egoist nor altruist is bound to defend his supreme choice; but neither can deny that his ideal is criticized by many of his fellow moralists for its narrowness. When, on the other hand, the object of the moral will is widened to include all conscious beings, when the good becomes the complete desired experience of the great community of selves completely interrelated by reciprocal needs and loyalties, when there are no longer truly conflicting interests of ego and alter, since each is recognized as necessary to the other and both are organically related in and to the Great Society — then, indeed, we have an objective, a more than individual conception of the chief good, a conception not only beyond challenge, but beyond criticism. With this consideration I complete, in barest outline, my justification of the thesis that ethics — a subjective science in that it deals with individual, experiencing selves — none the less admits objective judgments, that is, comparative judgments with a social reference.

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[1] The important epistemological use, in which subject and object mean respectively experiencer and experienced, is irrelevant in ethics.

[2] *The Origin and Development of the Moral Ideas*, Vol. I, Chap. I, p. 18.

[3] *Op. cit.*, I, p. 191.

[4] Westermarck, *op. cit.*, I, Chap. I, p. 4.

[5] G. M., p. 191^3, not traced.

[6] *Principia Ethica*, pp. 5-7, 6^3, 7^2.

[7] Ethics III, IX, *Schol.* Cf. Kant, *Metaphysik of Morality.* Hartenstein ed., p. 276.

[8] (Italics mine.) Cf. *op. cit.*, pp. 77, 129; 80 f., 132^2 f., 134.

[9] *Moral Philosophy*, pp. 185^2 f.

[10] Adapted and shortened from Moore's *Principia Ethica*, Chap. V, III, p. 185^2.

THE BASIS OF OBJECTIVE JUDGMENTS IN ETHICS

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AN ethical judgment is the explicit and articulate expression of a practical interest, activity, or attitude, just as a theoretical judgment is the equally articulate expression of a purely cognitive interest or attitude. At every level of practical activity, from the instinctive seeking of food or the instinctive shunning of danger, through the manifold preferences, desires, and interests of living beings, to the fully conscious recognition of some supreme organizing Good, there is always present a discernment of, and a response to, some value or some thing of value.

Because of this fact, because a *judgment* of worth is present (whether explicitly formulated or not) within our practical activities, our choices and preferences, our desires and interests, there exists the possibility of distinguishing between those practical attitudes which are valid and those which are invalid. By an *objective* ethical judgment, we mean a judgment which expresses and formulates a practical attitude which is valid. If there be a lower limit of practical activities, exhibiting no trace of any implicit judgment, such as may be the case in the purely physiological processes and tropic reactions of plants and the lower animals, then at that level no question of objectivity or validity arises at all. Only with respect to a judgment, or that which is akin to the nature of judgment, does the question of validity and objectivity arise. An event which just occurs, the fall of a stone or the growth of a seed, is real and exists; it is an objective fact, but it is neither valid nor invalid. It makes no claim to objectivity in any sense which is under discussion in the fields of the normative sciences.

Having said this, we seem committed to the necessity of making a fundamental distinction between the *basis* of objective (i.e., valid) judgments in ethics and the causally efficacious *factors* which condition ethical judgments (and the practical attitudes which such judgments formulate), and which thus determine their existence as events. Such practical activities, the moral life of individuals and communities, are, of course, events which occur, and like all events, they are embedded within a tissue of outlying energies and events, with causal linkages to those antecedent events which determine them to be the events that they are. But we primarily mean by the basis of objective judgments, in ethics as in cognition, that which makes such judgments valid, that which determines them to be true rather than that which determines their existence and which brings them into being as events which just occur. The necessity of making some such distinction seems clearly indicated by the one fact, if by nothing else, that both valid and invalid judgments are equally conditioned by antecedent causes; the good life and the bad life, the choice of the worse as well as the choice of the better, no less than a process of reasoning which is fallacious or sound — are, as events, the outcome of causally determining factors and processes. But only *valid* judgments, ethical or cognitive, possess a basis, in the sense of grounds upon which their validity depends. Invalid judgments lack any such basis.

The discovery of the causal factors which determine the existence of practical attitudes, of men's loyalties and their preferences, of morality as a fact and datum of human society, has come to be the task of the psychological, historical, and social sciences. The discovery of the objective basis of morality and of moral judgments, of the conditions which determine the validity or lack of validity of such judgments, is the central problem of moral philosophy. The first of these two tasks is to be accomplished by the observation and description of matter of fact, in the manner which has been impressively formulated by M. Lévy-Bruhl in his *Science of Ethics*. The second of these tasks plunges us into the philosophical conflicts of opposed theories in ethics, the theories of value, of knowledge, and of metaphysics. No wonder that men have tired of these disputes, and have urged that we concentrate our efforts upon the humbler but more feasible tasks of exploring the factual conditions, biological, psychological, and social, upon which the moral judgments and the practical life of an individual, a community, a culture, depend.

There is nothing more familiar in the history of modern reflection concerning the problem of validity, whether cognitive or practical and moral, than this distinction between the order of matter-of-fact energies which causally determine our judgments and the grounds upon which the worth of our judgments depend. But the problem becomes pressing whether these grounds upon which validity rests are themselves anything objective, whether they are in any sense knowable or verifiable. With the growth of the modern scientific conscience and scientific method, the conviction became prevalent that empirical, verifiable, and scientific knowledge has to do only with matter-of-fact structures and processes which determine subsequent events according to causal regularities and principles which it is the business of science to discover. This had as its result the belief that, since what we may really be said to know is never anything but matter of fact, the validity of our choices and deeds, our loyalties and ideals, is not subject to the jurisdiction of knowledge at all, but is solely a matter of feeling or of will.

We are, indeed, confronted by a dilemma. Some distinction there must be between the causes and stimuli, the conditioning factors of our judgments which psychology and anthropology, biology and sociology have so largely uncovered, and, on the other hand, the grounds which entitle us to believe that *some* of our judgments may be valid, our theoretical judgments true, and our practical judgments right. Now either one of two things. Either *all* of our judgments are completely determined by the mere matter-of-fact energies of nature, life, and society, *or* some, at least, of our judgments are or may be in part determined by the reasons which confer validity upon them. In the case of moral judgments this would mean that the *Good*, as an objective value, would be one of the conditioning elements determining, at least in part, our desires and our interests.

Naturalistic ethics chooses the first alternative. The only basis of moral judgments which it admits is the matter-of-fact forces which press upon us, forces and energies which are brutely factual, whether biological, social, or psychical. We may confer upon them a spurious and adventitious ideality and worth by clothing this matter of fact which constrains us with the cloak of value pronouncements as is done in the familiar hedonistic syllogism, to wit: The Good is whatever, as a matter of fact, is desired; what is desired is pleasure; therefore the Good is pleasure. When we strip away these fictitious trappings and see the moving forces of our practical life for what they are, we discover only blind and irrational factual drives, the pressure of vital impulse, or feeling and desire, of economic and social necessity. Such as these have alone generated and they alone really determine our moral judgments in ways which an adequate science of man may hope to uncover. The rock upon which this venture is shipwrecked is, we believe, the sheer impossibility on this basis alone, of ever making any distinction between valid and invalid judgments of value. Any such distinction becomes quite irrelevant the moment it is supposed that the determining factor of *all* judgments of value lies in an order of natural facts divested of every element or aspect of value, of the Good. The same kind of consideration is, we point out in passing, applicable to our theoretical judgments. If these, too, are completely determined by psychological mechanisms which go their own way regardless of the logical requirements and constraint of logical and rational principles, the distinction between true and false judgments, in so far as truth and falsity pertain to our judgments about what is real, becomes wholly meaningless.

Shall we then choose the second alternative, and say that our moral judgments (and this means our entire practical life at each successive level of its development) are *in part* determined by the causal factors which scientific knowledge may disclose, and also are, or may be, in some measure, determined by an objective Good which is wholly different from the empirical, factual, and causal elements which psychology, anthropology, and the social sciences are able to discover? This way lies the venture of Kantian and neo-Kantian ethics, with the dualism of a formal, intelligible world of freedom, and a mechanically conditioned order of real events, and with the hopeless task before it of making the Good which dwells in the intelligible world determine our deeds and at the same time keeping intact their complete determination by causal, psychological factors. This is, indeed, one form of that antinomy of ethical idealism and ethical realism which was depicted in the opening chapters of Royce's first published book. You appear able to maintain the integrity and autonomy of practical will-attitudes, of values and of ideals, only in so far as you refuse to base them upon the discovery of what does, as a matter of fact, exist in the order of nature, life, and mind. No ought or value judgment is derivable from premises which are solely descriptive of existence. But in thus apparently saving the autonomy of moral judgments and moral ideals, in thus escaping both the naturalistic and the metaphysical fallacies, you relinquish the possibility of any such control over judgments of value as we have over our theoretical judgments through an appeal to the facts. If, on the other hand, any judgments of value have an objective basis, their validity apparently rests upon the discovery of something which, as a fact, exists. This indeed means that value judgments are controllable and verifiable, but only at the cost of their autonomy. Their validity depends upon the *existence* of some fact and upon nothing else whatever. Value-judgments become but disguised Fact-judgments.

This dilemma and problem are characteristically modern. They spring from that radical bifurcation of value and existence (Fact) which is another form of that bifurcation of nature to which

Mr. Whitehead has ascribed so many of our modern perplexities in the philosophy of nature. The problem did not, in the main, present itself thus to the thinkers of antiquity because they did not draw the same boundary between the order of values and the order of facts with which we have long been familiar. For the thought of classical Greek idealism, what is known to be objectively real and hence capable of controlling our judgments, is both a "fact" and also a value. As Nettleship put it, for Plato "the reality of things is what they mean; what they mean is determined by their place in the order of the world; what determines their place in the order of the world is the supreme good, the principle of that order." (*Rep.*, p. 230.) In other words, both our theoretical knowledge of the real and our practical choices and ideals are not, or need not be, exclusively determined by the constraint of *mere* matter of fact, purged of every trace of objective meaning and value. Both our theoretical and practical responses to the world are, in so far as they possess validity, determined by an objective order which is both existential, real, and which is *also* the locus and expression of that which possesses significance, of the idea of the Good. This means that what for us are our practical and non-theoretical interests are a *discovery* and disclosure of an objective structure, of a Good which constrains, no less than are our theoretical judgments, in so far as they are valid, constrained and determined by the order of existence and the real. It means the refusal to effect a radical cleavage between the life of knowledge and the life of practice.

What now requires explanation and critical appraisal are the forces and motives which led to the disintegration of this central tenet of Greek idealism, and to the modern bifurcation of the order of matter of fact which alone is the object of our theoretical and cognitive interests, and the order of values upon which are directed our practical, our social, political, aesthetic, and moral interests. In such an inquiry, we should have, I believe, to note especially two things. First, that the extrusion of all aspects of value and meaning, of the idea of the Good, from the order of knowable facts in the interests of scientific intelligibility, was an offshoot of and an incident within a very deep and wide historical process, of a cultural division of labor, wherein each of the specific human interests asserted its autonomy and its independence of every other interest. Religious, political, and national, economic, aesthetic, and scientific interests and attitudes, each of these broke away from the control of any inclusive and total idea which made them all, in theory, moments within and aspects of a single organizing principle. The vitality and wealth of the energies which were disclosed within each of these major channels of human life proved to be too massive and overwhelming to submit to and to be constrained by the framework which had been inherited from classical antiquity and the Middle Ages. Now, just as the potency and pressure of economic motives and interests refused any longer to submit to the control of older moral and religious ideals (in the manner so masterly portrayed by Mr. Tawney in his recent study), just as the life of feeling and imagination discovered a wealth of new aesthetic meaning which disrupted the older fusion of art and religion, so likewise in the realm of knowledge and of science. The world of nature, life, and mind was discovered to contain an infinite wealth of facts which could no longer be pressed into the older, simple teleological framework of values and of the Good. The inevitable and fruitful result was the growth of the physical, biological, and historical sciences bent solely upon the discovery and mastery of the facts of nature and of life, a cognitive enterprise which would have been impossible had it been guided by the older traditional assumptions of the fusion of reality and value. But there resulted as well just that insistent dilemma with respect to the basis of our practical interests and our judgments of value, a dilemma which has its roots in the assumption that orderly knowledge and science deal only with matter of fact, which is *wertfrei*, stripped of all objective meaning and value, and that the world of our practical interests and values has its roots in will-attitudes, desires, and feelings, totally distinct from our cognitive apprehension of the real. On these premises, values are neither knowable nor intelligible. They belong to a dimension and realm apart from that order of facts which may be known by scientific and theoretical inquiry. The extrusion of values from the real, and hence the absence of any objective Good which determines our judgments of value leaves, in principle, no objective basis for value or moral judgments, as distinct from descriptive judgments of matter of fact.

It must be remarked, in the second place, that the order of physical processes, motions in space and time, supplied in the first instance the point of departure for the modern development of the sciences directed upon a study of the facts of experience. This physical order is characterized by a minimum of meaning, and a maximum of sheer "objective" fact. To locate the determining factors of a particular physical object or configuration one need go only to a contiguous physical object or the immediately preceding physical configuration. Such mechanical determination of physical facts by immediate impacts and shoves, and the apparent absence of all determination by anything more total, remote, or ideal, provided a paradigm which was taken over successively by the biological, psychological, and social sciences. Within the limits which were set by the physical sciences as a model, the possibility of discovering something other than brute contiguous facts as the determining factor of the processes of living organisms, minds, and historical structures, was reduced almost to the vanishing point.

In the present scientific and philosophical ferment, we are witnessing, I believe, a deep-seated dissatisfaction with the results to which we have been led through an acceptance of those initial premises which appeared, in the sixteenth and seventeenth centuries, as alone making possible the knowledge of things, untrammeled by the framework of ancient assumptions. The rigid demarcation of the order of facts from the order of values, whether Kantian, naturalistic, or romantic, and the belief, modeled upon the procedure of the physical sciences, that the sole determinants of all facts are the immediately contiguous facts in space and time, — these initial beliefs are being increasingly subjected to critical scrutiny. Living bodies, minds, historical individuals, and communities, when seen for what they are, are not congeries of particular facts and processes, each one of which is determined only by its immediately preceding causes and stimuli. There is, throughout, the pressure of something more total, inclusive, and organic. Even in the physical order, what strikes the attention of the layman is the necessity of recognizing a vastly more complex and, in a sense, a more ideal type of determination than any which the older mechanistic views were able to provide. In the order of living bodies, the concepts of organism and environment, of the maintenance of function, growth, and regulation, denote a kind of determination of specific biological data, quite other than their exclusive determination by physical impact and stress. As Herr Scheler has remarked, in the world as known by the physicist, there simply isn't any such thing as a retina responding to light and color. And in describing and understanding that which occurs in the order of mind and consciousness, — perception, idea, sentiment, desire, and interest, — it becomes necessary to go still further afield, vastly to increase the area of those determining factors which make our conscious lives what they are. Facts remote in space and time, structures, relations, and systems which far outreach the area of spatially and temporally contiguous causes, determine our memories and anticipations, our desires and our interests. This widening of the area within which the determining factors of both ideas and desires, our cognitive and practical acts, are to be sought, makes it possible, I venture to suggest, to say that an objective good or value constrains our practical life no less than that an objective real constrains our cognitive ideas. The objective Good is neither a shadowy, detached realm of validity, which leaves everything existing in nature and mind at the mercy of sheer mechanical determination, nor is it but the verbal cloak which we throw over some of the purely factual and brute energies which we single out from the play and welter of mere matter of fact.

Thus I should say that the only basis of objective judgments in ethics as of all value-judgments, whether theoretical or practical, lies in the nature of the real world, as that world is disclosed by experience, at all of its levels, and interpreted by clews which also are supplied solely by our total experience. This is to commit neither the naturalistic nor the metaphysical fallacies, for these fallacies arise only in case we first suppose that what exists has nothing to do with meaning or value, and then permit *that* kind of existence to dictate to us our moral ideals. Were existences wholly *wertfrei*, then the determinants of our existing judgments, acts, and attitudes would be equally *wertfrei*, and neither truth nor goodness would be there to torment us with their solicitations, and constrain those of our activities which are most characteristically human and rational.

SECTION 2

Time: Wednesday, September 15, 9.30 A.M.
Place: Smith Hall Common Room
Subject: Aesthetics
Chairmen: J. GIBSON HUME, Toronto
W. A. HAMMOND, Cornell

DESCRIPTION OF AESTHETIC EXPERIENCE

STEPHEN E. PEPPER
(*California*)

THE following is a series of points which are individually undemonstrated, but which collectively, I think, furnish a sort of demonstration of the limitations and the ideal of descriptive method in aesthetics:

Point 1: There are two distinct questions in aesthetics that have not often been kept distinct: (*a*) What is the nature of aesthetic experience? (*b*) What is the standard of art? It is widely assumed that an answer to one of these questions will be an answer to the other. I see no reason to assume that this is the case. To illustrate great things by small, it is one matter to describe the experience of tasting coffee, quite another to describe what constitutes good coffee. As regards art, my view is that the standard of art has to do with works of art, physical buildings, pictures, books, musical scores, and so on; and not, except remotely, with our experiences of these objects: That if there were no works of art but only experiences of beauty, there would be no standards of art, nor any aesthetic questions, except the most filmy, of better or worse. For it is only such objects in art that possess the universality and the permanency necessary to give sanction to any standard. I make this point at once so as to exclude the problem of standards from the analysis that follows.

Point 2: My next point is that there is no reason to assume that there is one field of experience that will exactly fit the current term, "aesthetic." The business of a philosopher is not to find the meanings of words (leave that to the lexicographer) but to find things for words to mean. The total field of experience can be divided in many ways. There are thus many modes of division, no one of which is necessarily the only right one; and there are many areas of experience demarcated by each mode of division, no one of which is necessarily predestined for the name aesthetics. Accordingly, two types of discussion are utterly vacuous: (*a*) that arising from the criticism of one mode of division on the basis of another mode of division; (*b*) that arising from an objection to giving one area of experience a name because someone has given another area of experience that name. Unless there is a prior agreement upon some criterion for the suitability of a name, there is no reason why any area of experience demarcated by a mode of division might not be given any name whatever.

Our problem in describing aesthetic experience is, therefore, twofold: (*a*) the choice of a mode of division for experience; (*b*) the determination of a criterion for locating the area of experience to be called aesthetic.

Point 3: I suggest the following criterion for locating the area of experience to be called aesthetic: — namely, that area which most nearly or most conveniently includes the experiences normally stimulated by classic works of art. I know no other criterion that is not based upon some arbitrary preference for a particular mode of division, or upon some prejudice for a particular connotation of the word "aesthetic." Classic works of art are as much universal facts as the objects we call planets, fish, or forms of government. But I give the concepts involved in "works of art," you observe, no importance as ultimate descriptive concepts. Works of art do not serve to define or demarcate the area of aesthetic experience; they serve only to locate it.

Point 4: A mode of division of experience: The area of aesthetic experience must be defined in terms of a set of descriptive concepts. As I have said, I see no reason why there might not be several equally right modes of division. A set of behavioristic concepts I think would furnish a particularly valuable mode of division. But I am going to use here for illustrative purposes a strange set which I believe has certain advantages in the general field of value experience.

Let us call experience "qualitied pattern in action." Let "qualitied" mean that there are felt differences. Let "pattern" mean that there are connections among qualities intrinsic in experience. Let us assume that there are degrees of strength of connection. A set of firmly connected qualities, we will call a qualitative integration. An integration may be connected with another integration, and so form an integration of integrations. Thus there are levels of qualitative integration. Let us furthermore assume that an uninterrupted integration of qualities tends to fuse into a single quality distinguishable from any of the integrated qualities. The fused quality of an integrated pattern is thus a mixture of the qualities of the lower level patterns that have been integrated. Think of a musical timbre, a compound hue, a tickle, an emotion. The constitution of a fused pattern, i.e., the arrangement of lower level patterns that are integrated in it, we will call the articulation of a pattern. In case of complete fusion that articulation is not felt, though the precise nature of the quality of the fusion depends entirely upon the articulation.

By "action" in our definition let us mean (*a*) that the articulations of a pattern rise to and fall away from a focus of intensity generally called the focus of attention; (*b*) that patterns meet patterns producing what we shall call "blocking." In case of the blocking of one pattern by another, the fusion of an integrated pattern is dissolved, some of the articulations come to view, and the result we call a discrimination.

By means of the above concepts, postulated or defined, we may define three sorts of acts — aversions, appetitions, and contentments.

(1) An aversion is a pattern one articulation of which must be excluded from the focus of attention, otherwise the pattern persists in occupying the attention.

(2) An appetition is a pattern one articulation of which must be brought upon the focus of attention, otherwise the pattern persists in occupying the attention.

(3) A contentment is a pattern every articulation of which must be brought upon the focus of attention.

When patterns are completely fused and before they are blocked it is impossible to tell aversions, appetitions, and contentments apart. But the moment discrimination occurs each exhibits its peculiar nature. In case of blocking such that the initial articulation of an aversion cannot be expelled, or such that the final articulation of an appetition cannot be reached, nor any articulation of a contentment, outside patterns are drafted in to bridge the gap. These we will call bridging patterns.

We are now in a position to state the experiences which constitute negative, positive, direct, and derived value. I give them in the following table.

TABLE I

I. Negative Values.
  (1) Fused aversions.
  (2) Initial discriminations of unfused aversions.
  (3) Blocking patterns.

II. Positive Values.
  (1) Fused appetitions.
  (2) Final discriminations of unfused appetitions.
  (3) Bridging patterns in appetitions, aversions, or contentments.
  (4) Discriminated articulations preceding final articulation in appetitions.
  (5) Discriminated articulations succeeding initial articulation in aversions.
  (6) Fused contentments.
  (7) Unfused contentments.

III. Direct Values.
  (1) Fused aversions = I (1).
  (2) Initial discrimination of unfused aversions = I (2).
  (3) Fused appetitions = II (1).
  (4) Final discrimination of unfused appetitions = II (2).
  (5) Fused contentments = II (6).
  (6) Unfused contentments = II (7).

IV. Derived Values.
  (1) Blocking patterns = I (3).
  (2) Bridging patterns in appetitions, aversions, or contentments = II (3).
  (3) Discriminated articulations preceding final articulation in appetition = II (4).
  (4) Discriminated articulations succeeding initial articulation in aversion = II (5).

Every form of experience appears twice in this table because all forms of experience are cases of either positive or negative value, and also cases of either direct or derived value.

Point 5: Having in this manner divided experience into a set of compartments, let us determine how many of these compartments may constitute the field of aesthetic experience. I shall approach this matter by a succession of exclusions, so forming a series of more and more constricted fields. The sort of experience excluded in each case and the resulting field of experience produced, I give in Table II.

TABLE II

1. Exclude bridging patterns.
2. Exclude blocking patterns.
3. Exclude discriminated, secondary articulations in appetitions and aversions.

} 1, 2, 3, exclude derived value

4. Exclude all aversions.
5. Exclude fused appetitions.
6. Exclude final articulations of unfused appetitions.
7. Exclude unfused contentments.
8. Exclude fused contentments.

I rather think no one would dispute me if I say that on the basis of our criterion (which was experiences resulting from the normal reaction to classic works of art), it would be impossible to consider the aesthetic field as large as (1) or as small as (8). But I should hesitate to say that reasons could not be produced to make it plausible to call any of the other fields aesthetic. It must be borne in mind that the normal experience to classic works of art merely locates the field; it does not demarcate it. Consequently, to take field (4) as an illustration, it might be maintained that the normal reaction to classic works of art is never negative, yet held that aversions should be included in the field called aesthetic because they represent the opposite of the normal reaction to classic works of art. It is, of course, also very plain that no one of these fields exactly corresponds to that of experiences normally stimulated by classic works of art, so that any field chosen is bound to include experiences which would jar with the (or with *a*) common usage of the term aesthetic.

Point 6: The upshot of the matter, then, is this: — (and remember I have been employing the preceding set of descriptive concepts in this paper only for illustrative purposes): The field of experience you or I may call aesthetic might be called by any other name. For a philosopher there should be no magic in a name. Our job is to find a suitable set of descriptive concepts, to remain consistent throughout our study with the set chosen, and to study some field naturally demarcated by those concepts. If that field includes among its experiences those normally stimulated by classic works of art, we may call our study of that field "aesthetics." But we need not get excited if somebody using another set of concepts, or even using our own set, pitches upon another field to call by that same name. The fruitful thing to study is experience and not what may happen to be the meaning of the word, aesthetic.

UEBER DIE STELLUNG DER AESTHETISCHEN WERTE IM REICH DER WERTE UEBERHAUPT

NICOLAI HARTMANN
(*Cologne*)

DIE Aesthetik unserer Tage leidet immer noch an dem traditionellen Fehler des 19. Jahrhunderts: sie ist noch vorwiegend Aktanalyse, nicht Gegenstandsanalyse. Dem ästhetischen Schauen und Geniessen, dem künstlerischen Schaffen forscht sie nach, nicht dem Objekt des Schauens und Schaffens. Und selbst wo sie dieses tut oder zu tun bemüht ist, orientiert sie sich doch nach den Akten, leitet die Objektscharaktere von ihnen her, statt sie autonom am Objekt selbst aufzudecken.

Die Folge ist, dass ein Wissen um die ästhetischen Werte und ihre Differenzierung noch fast gänzlich fehlt. So wertvoll das Geniessen, Schauen und Schaffen immer sein mag, seine Werte sind doch nicht die ästhetischen Werte. Aesthetische Werte sind ausschliesslich Werte des Gegenstandes. Man spricht wohl von ,,schönen Künsten,“ aber die Rede ist irreführend. ,,Schön“ ist weder die Kunst noch der Kunstgenuss, sondern einzig das Kunstwerk. An ihm haften die Werte — an ihm und an allem sonstigen, ausserkünstlerischen Schönen. Denn auch ohne die Kunst ist die Welt voll des Schönen.

Die Schwierigkeit aber, die der Wertforschung hier entsteht, liegt darin, das sich ästhetische Werte kaum beschreiben lassen, geschweige denn begrifflich bestimmen. Die allgemeinen Wertklassen, die man traditionell hinzunehmen pflegt, — wie das Erhabene, das Komische, das Tragische, das Groteske, das Zierliche usf. — betreffen nur gewisse immerhin wichtige, aber doch unbestimmte, weil generelle, Unterschiede des Wertvollseins. Sie wirken, in solcher Allgemeinheit gefasst, abstrakt und leblos. Aesthetische Werte sind eben im Grunde stets Werte eines einzigen Gegenstandes; sie sind individuell durchdifferenziert, von Fall zu Fall andere, und alles Vergleichbare, Gemeinsame, ja Typenhafte betrifft nicht ihr Wesen, sondern nur etwas ,,an ihnen.“ Der einzelne ästhetische Wert wie er am Gegenstande erscheint, ist durchaus inexponibel — nicht nur durch seine Komplexheit, sondern auch durch seine Heterogeneität gegen alles in Elementen und Komponenten Exponierbare. Wer von ihm handelt, kann ihn nie anders geben, als wie er am Objekt gegeben ist. Er kann nur hinweisen und an das lebendige Wertgefühl appellieren.

Hier besteht eine absolute Grenze aller Wertanalyse. Sie liegt weit diesseits der konkreten ästhetischen Wertcharaktere selbst, liegt noch tief innerhalb der vergleichbaren und heraushebbaren Wertkomponenten. Und diese sind nicht die ästhetischen Werte selbst.

Aber man kann ästhetische Werte wohl in genere als solche charakterisieren, indem man sie neben Werte anderer Art hält. Man charakterisiert sie damit zugleich in ihrer Stellung im System der Werte überhaupt. Am lehrreichsten ist hierbei ihr Unterschied gegen die sittlichen Werte, mit denen das Denken früherer Zeiten — so noch das der Romantik und des deutschen Idealismus — sie allzu nahe zusammengebracht hat.

I

Sie sind also nicht Werte des Aktes, weder des schauenden noch des schaffenden. Sie sind Werte des Gegenstandes dieser Akte. Aber sie sind deswegen nicht etwa Werte eines „an sich Seienden,“ wie es auch, ohne Gegenstand der Akte zu sein, bestünde, sondern Werte gerade nur des Gesgenstandes als Gegenstandes eben dieser Akte. Es sind Werte, die nicht am nackten Sein der Gebilde hängen, denen sie anhaften, auch nicht an ihrem spezifischen Sosein als solchem (ontologisch verstanden), sondern an ihrem „für uns Sein“ — im Unterschiede zu ihrem Ansichsein —, d.h. in ihrem Objektsein für uns.

Darin unterscheidet sich der ästhetische Gegenstand vom Erkenntnisgegenstand. Letzterer besteht unabhängig vom Erkenntnisakt; ja, der Erkenntnisakt ist echte Erkenntnis überhaupt nur, wenn sein Gegenstand ein übergegenständliches (transobjektives) Sein, ein Ansichsein, hat.[1] Widrigenfalls sinkt er zum blossen Denken, zur Vorstellung, zur Phantasie herab. Der Erkenntnisgegenstand ist also nur accidentellerweise Gegenstand. Der ästhetische Gegenstand dagegen ist wesentlich Gegenstand, und nur Gegenstand, nur „Objekt für ein Subjekt,“ und zwar für bestimmte Akte eines Subjekts. Eine Landschaft z.B. als Erkenntnisgegenstand besteht an sich; sie ändert sich auch nicht mit dem Standort, von dem sie gesehen wird. Sie besteht gnoseologisch indifferent gegen das Gesehenwerden. Als ästhetischer Gegenstand dagegen besteht sie nur für den Schauenden, wie denn die Perspektive des Schauens ihr wesentlich ist; darum ist sie ästhetisch von jedem Standort aus eine andere.

Hier nun wird ein grundwesentlicher Unterschied der ästhetischen Werte von den sittlichen sichtbar. Letztere sind nämlich durchaus

Werte eines Ansichseienden und zwar eines realen (z.B. der Handlung, des Willens, der Gesinnung). Deswegen besteht der sittliche Wert menschlichen Verhaltens auch keineswegs bloss „für uns" — etwa für jemanden, dem er zugute kommt —, sondern unabhängig davon.[2] Der ästhetische Wert einer Sache dagegen besteht nicht unabhängig davon, sondern nur für das schauende Subjekt. Er ist eben Wert eines bloss „objektiven Seins," keines Ansichseins.

Nennt man nun mit Kant ein solches objektives Sein ohne Ansichsein „Erscheinung," so kann man die Seinsweise des ästhetischen Gegenstandes, sofern sie auf bestimmte Akte eines Subjekts rückbezogen ist, gleichfalls Erscheinung nennen, und zwar im objektiven Sinne des Wortes. Und ästhetische Werte dürfen alsdann, sofern sie Werte des Gegenstandes als Gegenstandes sind, auch als Werte der „Erscheinung als Erscheinung" gelten. Für die eigentümliche Art, wie sie mitten in der Welt des Wirklichen (Ansichseienden) auftauchen, und dennoch in Gegensatz zu ihr treten und gleichsam unberührt von ihr über ihr schweben bleiben, ist gerade der Erscheinungscharakter ihres jeweiligen Trägers wesentlich.

Es kommt hierbei darauf an, jedes subjektivistische Missverständnis abzuwehren. Die Erscheinung ist nicht aktgetragener Gegenstand, nicht „Vorstellung," Gedanke, nicht bloss intentionaler Gegenstand, wohl aber ein nur relativ auf den Akt und „für" ihn bestehender, und insofern ein durch ihn mitbedingter. Ein solcher ist und bleibt gebunden an ein real Ansichseiendes, ja an ein Materielles (an den Ton, das Wort, die Farbe, die Raumform des Marmors). Aber diese Bindung besteht lediglich dadurch, dass das Reale eigenartig geformt ist, den Akt hervorzurufen. Und sofern diese Eigenart der Form für jedes schauende Subjekt besteht, das sie zu fassen befähigt ist, besteht durch sie jene Allgemeingültigkeit (oder subjektive Allgemeinheit) der ästhetischen Werte, die Kant als charakteristische „Quantität" des Geschmacksurteils auszeichnete.

Sind aber ästhetische Werte auch bloss Werte eines Gegenstandes als Gegenstandes, oder einer Erscheinung als Erscheinung, so sind sie deswegen doch nicht selbst bloss gegenständlich, oder bloss Erscheinung. Sie selbst vielmehr werden niemals Gegenstand — auch nicht Gegenstand ästhetischen Schauens. Sie bestimmen nur den Wertcharakter des Geschauten, bilden also einen Massstab, der jenseits der Erscheinung und des Gegenstandes an sich besteht, der sich auch nicht ändert, wenn der Gegenstand ihm nicht entspricht. Wir nennen im letzteren Fall den Gegenstand eben

„hässlich;“ wir sprechen ihm nur den Wert ab und dokumentieren damit die Unabhängigkeit des Wertes von ihm. Es gibt also sehr wohl ein Ansichsein der ästhetischen Werte — nicht anders als das aller übrigen Werte auch[3] —, im Gegensatz zum blossen „Fürunssein“ des ästhetischen Gegenstandes, der ihr Träger ist, und an dem sie erscheinen. Und da dieses Ansichsein kein reales sein kann, so kann man es nur als „ideales Ansichsein“ bezeichnen. Auch darin unterscheiden sich ästhetische Werte nicht von ethischen und fügen sich, ohne das Gesetz der Sphäre zu durchbrechen, ohne weiteres dem System der Werte überhaupt ein. Der Unterschied liegt nur darin, dass sie nicht auch „Werte eines Ansichseienden“ sind. Denn ihr Träger ist es, der nur gegenständliches Sein hat.

II

Sie unterscheiden sich zweitens von sittlichen Werten dadurch, dass ein anderes Verhältnis von Macht und Ohnmacht an ihnen waltet.

Es sei zum Verständnis dessen an anderweitig Ausgeführtes erinnert.[4] Sittliche Werte haben von sich aus nicht die Kraft, sich im Realen durchzusetzen (sich zu realisieren); wohl aber haben sie die Tendenz dazu. Diese Tendenz ist das für sie charakteristische Seinsollen. Das Reale nun fügt sich dem Sollen keineswegs, wie es sich seinen Seinsgesetzen fügt (etwa den Naturgesetzen); es entspricht oder widerspricht ihm, unbehindert durch sie, aber auch ohne ihre Gültigkeit zu beeinträchtigen. Darin liegt die Ohnmacht der ethischen Werte — im Vergleich mit den Seinsprinzipien, als den unverbrüchlich von Fall zu Fall determinierenden. Ihre Realisation dagegen kommt erst zustande, wo ein reales Wesen, welches sie erfasst, sich für sie einsetzt. Ein solches Wesen ist der Mensch. Die realisierende Kraft ist dann aber die seine, und nicht die der Werte. Dennoch sind es mittelbar die Werte, die diese Kraft in ihm auslösen, eine Kraft, die sich im Gegensatz zur allgemeinen Seinsdetermination durchsetzen muss und insofern der letzteren irgendwie überlegen sein muss. Ethische Werte sind also einerseits schwächer, und doch anderseits stärker als Seinsprinzipien.

Anders ist das Verhältnis bei den ästhetischen Werten. Sie teilen die Ohnmacht der ethischen Werte, aber nicht ihre Macht. Denn ästhetische Werte werden, streng genommen, überhaupt nicht realisiert, weder durch ihre eigene noch durch eine fremde Kraft (etwa die des Künstlers); ebenso wenig aber auch durch den

„Zufall“ im sog. Naturschönen, im Leben, am Menschen usf. Gemessen an der Wirkung im Realen also zeigen ästhetische Werte eine noch grössere Ohnmacht.

Was das bedeutet, ergibt sich leicht, wenn man die obigen Ergebnisse substituiert. Aesthetische Werte sind eben gar nicht Werte eines Ansichseienden, und nun gar eines Realen; sie sind Werte des Gegenstandes als Gegenstandes, der Erscheinung als Erscheinung. Sie haften nicht am Realen, sondern an einem anderen, einer Hintergrundsschicht, die durch das Reale nur hindurch-scheint und von ihm getragen ist. Sie können also garnicht „realisiert“ werden.

Aesthetische Werte haften an einer Hintergrundsschicht der Gebilde, denen sie zukommen; und diese ist in der Tat nicht real. Schön ist an der Landschaft der Bildcharakter, aber er besteht nicht real an sich, sondern nur „für“ den Schauenden. Leben und Bewegung des Diskoswerfers sind im gemeisselten Marmor nicht real vorhanden, sondern nur „dargestellt,“ und doch liegt in ihnen gerade der künstlerische Wert. Das seelische Sein und die Konflikte auf der Bühne sind und bleiben irreal, werden auch nicht als real vorgetäuscht; dennoch sind nur sie das „Eigentliche,“ an dem die dramatischen Werte hängen, nicht aber die real gesprochenen Worte und Aktionen. Vollends durchsichtig wird dieses Schichtenverhältnis in der Musik. Die in der Zeit ablaufende Klangfolge der Fuge ist real; aber das sich in ihr aufbauende und gleichsam türmende Ganze, dasjenige, was am Schluss geschlossen beisammen ist, wenn die Klangfolge verklungen ist, das ist nicht real und kann nie real werden; dennoch ist es für den musikalisch Hörenden vorhanden, und an ihm hängt der musikalische Wert.

Werte dieser Hintergrundsschicht sind also sicherlich ebensowenig realisierte Werte, als die Schicht selbst eine reale ist. Nun aber darf man sie nicht einmal schlechthin als Werte dieser Schicht bezeichnen. Sie haften wohl an ihr und bestehen nie ohne sie, aber sie liegen nicht in ihr allein. Sie sind vielmehr Werte ihres Erscheinens in einem Realen, Werte eines eigentümlichen Verhältnisses zwischen ihr und der realen Vordergrundsschicht. Weder der ideale Hintergrund noch der reale Vordergrund ist allein der Träger des Schönen, sondern nur beide miteinander und durcheinander, d.h. gerade in ihrem Hintereinander-Geschichtetsein: das Ideale dadurch, dass es in einem Realen „erscheint“ (wie es sonst nirgends in der Welt erscheint); und das Reale dadurch, dass es vom Idealen durchleuchtet (für sein Eigenlicht transparent) ist. Nicht das ideale Sein als solches ist das Schöne, wie der Platonismus aller Zeiten gemeint hat; sondern einzig das Erscheinen des Idealen in einem Realen, resp. die Transparenz des Realen für das Ideale, ist das Schöne. Die ästhetischen Werte sind Werte dieses Verhältnisses. Und deswegen sind sie Werte nicht eines Ansichseienden — weder eines realen noch eines idealen —, sondern nur Werte eines „Gegenstand-Seienden.“ Denn sie bestehen nur für die Hindurchschau des Schauenden. Die Transparenz geht in ihrem Erscheinung-Sein für ihn auf.

Aesthetische Werte werden also wohl ins Reale gebannt — und nur in dieser Bannung werden sie sichtbar, resp. fühlbar (auch für den Künstler, denn auch er hat keine andere Form der Schau als die im Konkreten) —, aber die Bannung ist nur ein Zur-Erscheinung-Bringen, nicht Verwirklichung (Realisation). Was mit den ästhetischen Werten in der Kunst in Wahrheit geschieht, ist Darstellung, nicht Realisierung. Diese Darstellung ist objektiv, ist gegenständlich in strengem Sinne und selbst Gegenstand der Schau; sie gehört also weder zum Schauen noch zum Schaffen, sondern zu dem, worauf beide gerichtet sind. Sie ist deswegen auch nicht gleichgültig gegen das Reale, „in“ welchem sie sich darstellt (das Material); man kann dasselbe nicht beliebig in beliebige Materie fassen, wie man ein Sujet etwa auch in Begriffen wiedergeben kann. Sondern sie ist die innerlich notwendige Darstellung eines sich Offenbarenden, dessen Wesen die bestimmte Form in bestimmter Materie allein zulässt. Darin wurzelt die Einzigkeit und Unnachahmlichkeit des echten Kunstwerks.

III

Nichtsdestoweniger entspricht der grösseren Ohnmacht der ästhetischen Werte auch eine grössere Macht. Jene Ohnmacht bezieht sich auf die Sphäre des Realen; diese drängte sich durch den Vergleich mit den ethischen Werten auf, deren Sollenscharakter auf Realisation geht. Die Sphäre der ästhetischen Werte aber ist garnicht das Reale. Darum ist es eigentlich auch gar keine Ohnmacht an ihnen, dass sie nicht ins Reale durchdringen. In ihrer Sphäre aber, in der Sphäre der Erscheinung oder des Gegenstandes ohne Ansichsein, haben sie offenkundig eine grössere Macht; denn in dieser Sphäre gibt es ein ganz anderes Mass an Freiheit. Darin liegt die Ueberlegenheit der ästhetischen Werte. Sie ist, wie die Seinsweise des ästhetischen Gegenstandes, nicht von dieser Welt, und dennoch in sie hineinragend und in ihr spürbar.

Sittliche Werte müssen die Erdschwere des Realen nach sich ziehen; das liegt in ihrer Tendenz des Seinsollens, und das eben ist die unendliche Aufgabe der Verwirklichung, die demjenigen erwächst, der sich für sie einsetzt. Die Verwirklichung aber stösst allerorten auf den Widerstand des Realen, das seine ontische Geformtheit immer schon hat. Anders die ästhetischen Werte. Sie stossen auf keinen Widerstand, denn in ihrer Tendenz liegt es gar nicht, das Reale umzuformen. Sie lassen nur ein anderes in ihm „erscheinen“ und erscheinen selbst in dessen Erscheinungsform. Sie gestalten ein bildsameres Material, das der Erdschwere des Realen entbehrt. In ihrer Machtsphäre gibt es ganz andere Möglichkeiten als im Reich des Wirklichen. Ob es „unbegrenzte“ Möglichkeiten sind, wie die Populärästhetik gerne meint, mag immerhin fraglich sein. Jedenfalls aber sind ihre Grenzen nicht die sehr eng gezogenen der realen Ermöglichung; denn Verwirklichung besteht in schrittweiser Realermöglichung. Darstellung aber und Erscheinung schreiten über das Realmögliche hinweg, ja sie treten direkt in Gegensatz zu ihm.

Die Enge des Möglichen besteht überhaupt nur im Realen, wo jede Möglichkeit eine lange Kette von Bedingungen voraussetzt, die alle schon real erfüllt sein müssen. In der Sphäre des ästhetischen Wertes herrschen auch Gesetze. Aber es sind keine fremden Gesetze, sondern nur die seinen. Sie haben also hier keine heterogene Determination gegen sich, die erst zu überwinden wäre. Die Gesetzlichkeit der ästhetischen Werte ist in ihrer Sphäre nicht nur „autonom“ — denn das ist jede Gesetzlichkeit in ihrem Reich —, sondern auch „autark,“ d.h. in buchstäblichem Sinne selbstgenugsam und absolut.

Hierauf beruht die erstaunliche Kraft der Kunst, die „Idee“ erscheinen zu lassen, wie sie in der Wirklichkeit nie erscheint. Ja sie ist imstande, dem Menschen seine höchsten Ideale in bildhafter Konkretheit und greifbarer Lebendigkeit vor Augen zu stellen — wie die Moral das Denken, die Ueberlegung und Belehrung es niemals können. Sie kann darum prophetisch zum Menschen sprechen, kann seine Liebe zu dem erwecken, was da werden soll — hinweg über den langsam schreitenden Geschichtsprozess, wie über alles Reale. Sie kann damit freilich auch den realen Geschichtsprozess beeinflussen, denn nichts vielleicht hat auf die Dauer so viel Macht in der Geschichte als erschaute und erschaubar gemachte Ideen. Aber sie selbst bleibt indifferent gegen den Geschichtsprozess, und die realen Mächte, die ihn treiben; wie sie denn auch indifferent dasteht gegen allen ausserästhetischen Gehalt dessen, was sie darstellt und der Mitwelt erschaubar macht, — gegen allen ethischen, sozialen, geschichtlichen, religiösen oder theoretischen Gehalt der Ideen. Er ist und bleibt in ihr, wie alles rein Inhaltliche, bloss der Stoff, über dem sich die ästhetische Form erhebt. Denn diese liegt — wie ihre Werte — so wenig im idealen Hintergrunde wie im realen Vordergrunde des Kunstwerks, sondern in der Art, wie jener in diesem erscheint und ihn durchleuchtet. Man sieht dieses Verhältnis am deutlichsten in gewissen volkstümlichen Gattungen der Dichtung, im Mythos, im Märchen, in der Heroendichtung, aber auch in zahlreichen Formen der bildenden Künste — überall da, wo ein Zeitalter in ihr seine Menschenideale ausprägt. Und vielleicht spielt geschichtlich alle ,,grosse Kunst" an ihrem Teil eine ähnliche Rolle, wie die Dichtung Homers sie bei den Griechen spielte, jene Dichtung, die nicht nur Götter, sondern auch Männer geschaffen hat. Diese sonderbare Macht der Kunst im Leben bildet ein sehr eigenartiges Grenzkapitel von Ethik und Geschichtsphilosophie; denn sie betrifft die Rolle der ästhetischen Werte als bewegender Kräfte im Leben des ,,objektiven Geistes" — d.h. desjenigen Geistes, der real in der Prägung von Völkern und Zeiten sich entfaltet, ohne doch im Geist des Individuums aufzugehen, an dem als Träger er erscheint. Aber diese Rolle ist nicht das eigentlich ästhetische Wesen der Werte und charakterisiert deswegen auch nicht ihre Stellung im Reich der übrigen Werte.

Das Tun der Kunst und des ästhetischen Schauens im Leben überhaupt ist nicht Hinstreben auf Wirklichkeit, sondern Entfernung von ihr. Bis in die wechselnden Kunststile der Zeitalter hinein lässt sich das verfolgen; denn aller Stil ist schon Formprägung im Gegensatz zum Wirklichen. Und sofern alle Kunst ihrer Materie nach wirklichkeitsgebannt ist und von einem Wirklichen ausgeht, lässt sich sagen, dass ihre ideale Tendenz im Gegensatz zu allem praktisch Ethischen auf das Gegenteil der Verwirklichung geht, auf ,,Entwirklichung." Hierin liegt der Grund, warum der Charakter der künstlerischen Freiheit ein so ganz anderer ist, als der der sittlichen. Sie ist eben recht eigentlich Freiheit ,,von etwas," nicht Freiheit ,,zu etwas" (wie die Willensfreiheit), nicht Freiheit der Notwendigkeit und der Eigentendenz, sondern Freiheit der Möglichkeit und des unbegrenzten Offenstehens. Die Kunst bleibt jenseits des Wirklichen schweben; und sofern ihr Sein und ihre Tendenzen durch Werte bestimmt sind, so lässt sich von diesen erst recht sagen, dass sie als solche ins Wirkliche nicht eingreifen, sondern mitsamt ihrem Träger jenseits des Wirklichen, über ihm schwebend, verharren, es nicht tangierend oder bewegend, selbst aber gleichfalls von ihm nicht bewegt.

In einem Punkt freilich könnte man zweifeln, ob dem so ist. Im Leben des Künstlers erweisen sich ästhetische Werte als sehr reale Mächte. Sie erfassen ihn zuinnerst, lassen ihn nicht ruhen, führen ihn wohl gar dazu, alles für sie zu opfern, Leben, Wohlergehen, persönliches Glück. Sie sind, einmal erschaut, sein inneres Schicksal. In diesem Sinne sprach Schelling vom Künstler als dem Menschen mit eigenem inneren Schicksal. Hier bestimmt der ästhetische Wert doch ein durchaus Reales, ein Menschenleben in seiner Einmaligkeit und Unwiederbringlichkeit.

Aber dieses Bestimmen eines Realen ist himmelweit verschieden von dem, welches vom sittlichen Wert ausgeht in seiner Realisation durch den Menschen. Hier bestimmt der Wert weder den Gegenstand, der sein Träger ist, noch bestimmt er etwas „zu sich" (zur Realisation seines Wesens); sondern er bestimmt ausschliesslich den Künstler. Da er selbst aber garnicht im Künstler, sondern nur im Werk des Künstlers erscheinen kann, so kann er auch den Künstler gar nicht zur Wertrealisation in seinem Leben bestimmen, sondern nur zum Schaffen des für ihn (den Wert) Transparenten, oder richtiger, des Erscheinungsverhältnisses zwischen den Schichten des Kunstwerks, in welchem der Wert sich darstellt. Der ästhetische Wert also — im Gegensatz zum ethischen — bestimmt den Menschen, der ihn erfasst, nicht zu seiner Realisation an ihm selbst (dem Menschen), sondern zu seiner „Darstellung" in einem anderen. Dieses Andere eben ist das Kunstwerk. Die Darstellung selbst aber ist die Kunst.

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[1] Vgl. Metaphysik der Erkenntnis, 2. Aufl. Berlin 1925, S. 47, 50 ff.

[2] Vgl. Ethik, Berlin 1925, S. 128–133.

[3] a. a. O. S. 139 ff.

[4] a. a. O. S. 161–164.

WISH FULFILMENT AND INTUITION IN ART

DeWitt H. Parker
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CROCE'S philosophy of art may be regarded as a revival of the major tradition of continental aesthetics. According to this tradition, art is a species of knowledge, imaginative knowledge or intuition. The fact that for Croce the object of intuition is the individual and not the universal, or Idea in the Platonic sense, is of lesser importance, for the fundamental thesis is retained that the value of art is *cognitive.*

A very different conception of the value of art emerges from the application to aesthetics of recent theories of the imagination. Common to all these theories is the conviction that the imagination in its various forms, dream, day-dream, play and art, exists, not for the sake of cognition, but for the purpose of providing a vicarious satisfaction of desire.

That this is true in the case of art can, I think, be proved. First, it can be shown that all of art belongs to the general sphere of the imagination. Characteristic of the imagination is the provision of substitute objects, which are in the words of Vaihinger "as if" they were real, in the place of real objects of belief. The objects seen in a dream are the simplest examples. That the literary artist creates such objects is obvious; literature is a verbal image of life; a word is a surrogate for the thing it means. When, for example, I read

> These delicates he heaped with glowing hand
> On silver dishes and in baskets bright

it is as if the delicates, the silver dishes and the baskets bright were spread before me. That the so-called imitative arts also create substitute objects is no less evident. The shaped marble of the statue is not, but is as if it were Aphrodite; the Fête Champêtre attributed to Giorgione is only a patch of colors, but is as if it were figures in a landscape; and Eva LeGallienne is not, yet is as if she were Hilda in the Master Builder. In art and in play, to be sure, the imagination does not operate, as it does in the dream, within the inner world alone, but lays hold of perceptual objects to serve its ends. These objects are, however, given the same function as images: what the doll is for the child, or the spool for the kitten, the work of art is for man, an instrument of imagination, a substitute for reality. And these substitute objects provide substitute satisfactions: the doll has the value of a baby, the spool of a mouse, the Aphrodite of a woman, and whatever be the satisfactions in open spaces, unending vistas, free companionship, and nudity, such are the pleasures offered, in imaginative form, by the Giorgione. As desire evokes images in a dream, so does desire create works of art for its appeasement.

The imaginative character of beautiful industrial art, of music, of pure color and line art, and of the dance is not so easily discerned; for the presence of substitute objects is not obvious. Yet the beauty of every work of industrial art depends basically upon its power to provoke a vivid anticipation of its usefulness; upon this all subtler aesthetic values of space or of line and color are superposed. A beautiful country house, for example, is one which causes us to imagine, before experiencing, the comfort of living there: it is a dream of a house. The perception of the imaginative character of beautiful color and line, of music and the dance, follows upon the insight that imagination is primarily a type of satisfaction of desire, and that the image or other substitute object, important as it is, is secondary and instrumental to desire, — an insight fatal to the absoluteness of "imitation of nature" as a criterion of excellence in art. In the more fundamental sense, imagination exists whenever a desire is satisfied, not through interaction with the environment in an adaptive fashion, but through activities and experiences conditioned within the organism itself. Now satisfactions of this kind supervene when I listen to a melody, or respond to the color or movement of line of a Persian rug; for as I listen or look, impulses are aroused and appeased, not by dominating or using real objects in the environment, but through auditory or visual processes within my own mind and body. The same thing occurs when I dance, for then I am having my way by creating a little closed world of movement sensations all my own, not by adjustment. The specific quality and worth, as well as the limitations of imaginative satisfactions come from the fact that they are such satisfactions as can be obtained through activities which stop short of adaptive interaction.

Even realistic and pessimistic art provide a subtle kind of satisfaction of desire through the imagination. Different types of wish fulfilment through art should be distinguished. In one type, ideal art, the spectator identifies himself with an ideal substitute object, or else finds in that object a complement to desire. The satisfaction of the woman spectator in the Aphrodite illustrates the former procedure, while the satisfaction of the man illustrates the latter.

But it is clear that works of realistic art do not conform to this type. For a statue by Daumier or a drama by Ibsen represents neither what one would wish to be oneself nor what one craves as a perfect complement to desire; yet such works provide imaginative satisfactions of desire. They do so in two ways. First, they offer substitute objects through which the need for emotional stimulation, inadequately satisfied through our social relations with our fellow men, can be appeased. Man possesses an excess of emotional responsiveness; this excess is partly absorbed through the substitute objects of realistic art. Even pessimistic and tragic art, by arousing pity and fear and kindred emotions, serve the same end. Secondly, by offering us more or less faithful substitute objects, realistic art satisfies our curiosity about life; we discover what life is like through observing its image. And the satisfaction of the impulse to knowledge belongs as legitimately to art as the satisfaction of any other desire. But it has been the mistake of the intellectualist tradition in aesthetics to regard the interest in knowledge as the sole interest in art, whereas all other interests may with equal right be satisfied there, and the interest in understanding invariably follows the track of some other desire. In pessimistic art, for example, it is ancillary to the need for an inner adjustment to a new and disillusioned vision of reality. This need has been the dominant motive of every great work of pessimistic art, of a Leopardi say, or a Hardy.

Even the form, as distinguished from the content, of art is determined by desire and satisfaction. A work of art, besides being a little world freely created in the imagination for the appeasement of desire, is a world characterized by design. Now it is possible to prove that the fundamental principles underlying design in art: organic unity (pervasive expressiveness); the existence of one or more motifs or themes; the repetition or modulation of these; the subordination of some elements of the whole to others (hierarchy); balance; and the evolution of a meaning, as in the plot of a story or the development of a melody, are principles of value everywhere; that all experience, when it achieves integral satisfaction, tends to possess the form of a work of art. As Plato divined, the form of the good and the form of the beautiful are the same. For experience, as a whole, is good, in so far as its elements, the sense impressions and the eventual meanings, conspire to some single end or value; when it is clarified and consolidated through stable habits or purposes, freely chosen and distinctive of itself, like the themes of a musical composition, and so possesses, like a work of genius, style;

when these purposes appear and reappear, always the same, yet enriched by new applications; when, again, the opposing elements of human nature, of its night side, as well as its daylight side, receive a balanced satisfaction, so that the whole man is expressed; when there is subordination to the major interests, yet some value in the minor elements on their own account; when, finally, life has a career, definite in outline, yet providing opportunity for curiosity, suspense, climax, and adventure; a life so built is a good life. And it was inevitable that, constructed by man for his delight, out of materials utterly plastic to his will, art should exemplify the form of that will when it is happy.

If the description of art which I have given is true, the value of art cannot be distinctively or exclusively theoretical. Nevertheless, a work of art is an intuition in the Crocean sense. For, according to the account in the *Estetica*, by intuition Croce means an objectified, consolidated experience, freed from judgments of reality and practical interests, and standing out in consciousness with a unique physiognomy. Probably as the result of the development of Croce's philosophy into a voluntaristic idealism, and doubtless as the fruit of renewed reflection upon art, this conception of intuition was later enriched (in the *Pratica* and the Heidelberg Address) by the recognition that every aesthetic intuition contains desire or aversion. Now in this sense of intuition, art is, I repeat, intuition. For, as we have seen, the core of the artistic imagination is a wish, one, however, that does not lead to practical interaction with the environment for its fulfilment, but to the creation of a world within the mind. Since, moreover, in the case of art, imagination does not remain a purely inner affair, but lays hold of the senses to serve its ends, and is given form, it acquires the objectivity and clarity characteristic of intuition. Emerging from the flux of impression and mood, the aesthetic experience appears dissociated against the background of the mind, and becomes possessed, like the phenomenal objects of outer experience, with the semblance of independent reality. The failure of impulse to pass over into action, and its resulting absorption in the image or other substitute object, facilitates dissociation. The fact that many of the wishes embodied in art belong to the subconscious stratum of the mind, also favors dissociation. Even the most intimate of aesthetic experiences, of music and of lyric poetry, are objectified, — myself they are, yet not myself. The objectivity of aesthetic experience is furthered, finally, by the process which Croce has called *extrinsication*, the creation of permanent stimuli by means of which appreciation can be repeated again and again, and surveyed at leisure, like a thing. At will I can command the experience of a painting or a poem, and meditate upon it at pleasure, even as I can command the experience of the moon or a crystal. Hence through art I not only feel, but possess and re-possess my feeling for reflection, for understanding. Thus is art intuition, and through art man obtains, as he can in no other way obtain, insight into himself.

However, although art is intuition, it is, I must insist, something more. Art provides not only insight into desire, enabling us to know its essence; it appeases desire. For the poet, just in uttering his longing in musical words

Oh, to be in England
Now that April's there

gives it surcease. And even when the poet tells us that his desire cannot be fulfilled, it is remoulded into satisfaction

. . . then on the shore
Of the wide world I stand alone and think
Till love and fame to nothingness do sink.

The value of art is never a mere knowledge value, a value of intuition and insight, but as providing an imaginative satisfaction of desire, it is a practical value as well, in the larger meaning of practical. Underlying every artistic intuition there is a happiness achieved, be it only for a moment. So we return to the conception of art as an imaginative satisfaction of desire, with a place beside dream and day-dream and play. Yet this does not involve any loss of the Crocean insight, for unlike dream and play, art is also contemplation. The two values, of wish fulfilment and of intuition, are not incompatible; they co-exist in art. The defect of the continental tradition in aesthetics, to which Croce's philosophy of art belongs, is its neglect of the one; the fault of all emotionalist, including recent Freudian theories, is the neglect of the other. In the words of Plato, when asked which we shall have, we shall, like children, answer, "Give us both."

L'ART DU DRAME JAPONAIS « NO »

T. Yamada
(*Tokyo*)

Mesdames et Messieurs,

Vous avez sans doute entendu dire qu'il existe au Japon une sorte de théâtre qui s'appelle « No. » Le « No » se compose de danses, de chansons et de gestes. Il ressemble beaucoup à l'opéra européen, mais il est plus proche du théâtre normal, et puis sa mélodie est tout à fait spéciale. Il a quelque chose de la danse européenne, mais il contient en plus des éléments du théâtre, et en outre sa danse a un caractère qui n'est propre qu'à elle seule. Surtout on doit savoir qu'il y a dans ses gestes quelque chose qui le différencie de toutes les autres espèces de théâtre. Les gestes du « No » sont l'expression de notre sentiment, par un mouvement essentiel, autour duquel doivent s'ordonner tous les autres mouvements accessoires. Et, de plus, il a un idéal artistique tout spécial, qui le distingue aussi des autres espéces de théâtre. Je pense que le « No » constitue un genre dramatique qui n'existe qu'au Japon.

Au Japon, il y a deux espèces de théâtre: 1°) le théâtre normal qui a les mêmes caractères que le théâtre occidental, et, 2°) le « No. » Parmi les pièces du théâtre japonais normal, on peut trouver quelques pièces qui sont, à proprement parler, de cette dernière espèce, mais qui ont été remaniées à la façon du théâtre normal. Ce fait s'explique par l'histoire du théâtre japonais. Le théâtre japonais, tout d'abord, a commencé par le « No, » et c'est de ce « No » qu'est sorti, par dérivation, le théâtre normal.

Comme le « No » constitue un genre dramatique spécial au Japon, vu également que le « No » est à l'origine même du théâtre japonais, et qu'il a des relations très intimes aujourd'hui encore avec le théâtre normal japonais, je pense que l'étude du drame « No » est indispensable à l'étude du théâtre japonais. J'ajoute encore la remarque importante que voici: comme l'art du « No » a sa racine dans l'idéal artistique spécial aux Japonais, l'idéal artistique que l'on peut trouver même dans l'art de la cérémonie du thé ou dans l'art de la poésie japonaise dite Haikai, l'étude du « No » est très importante pour l'étude générale du goût japonais.

Le « No » a commencé, il y a six cents ans, par le « No de Dengaku; » — puis, il a continué par le « No de Sarugaku » qui a donné définitivement au « No » les caractères indispensables à tout théâtre. Comme le théâtre japonais normal, qui n'est que le « No » remanié et plus populaire, est considéré comme le théâtre bourgeois, et comme les Samurais qui ont une culture raffinée ne sauraient assister publiquement à la représentation des pièces du théâtre normal, les Samurais trouvent dans le « No » le seul genre de théâtre où ils puissent donner satisfaction à leur goût du théâtre. Voilà pourquoi le « No » a pu exister parallèlement au théâtre normal jusqu'à ce jour, et a pu conserver sa forme première, établie il y a cinq cents ans environ.

Le « No, » qui a une si longue histoire, a fourni au public beaucoup de pièces excellentes et beaucoup d'artistes de génie; mais, malheureusement, il n'a presque jamais donné au public d'écrits théoriques sur l'art du « No. » Et depuis longtemps l'art du « No » est regardé comme un art que l'on doit étudier en se faisant acteur du « No. » C'est là une grave source de difficulté pour ceux qui désireraient étudier cet art excellent, sans devenir eux-mêmes acteurs de « No. » Par bonheur, il y a environ dix ans, on a trouvé, lors d'une vente publique des biens d'un seigneur japonais, seize volumes sur l'art de « No » écrits par un acteur de génie, du nom de Seami. Ce fut là, naturellement, une grande surprise, en même temps qu'une grande joie pour ceux qui désirent étudier l'art du «No. »

Comme les autres acteurs japonais, tous les acteurs du « No » appartiennent chacun à une famille qui joue le « No » par profession et cela de génération en génération. Et chaque famille a sa manière propre de jouer le « No. » Parmi ces familles, il y en a une qui s'appelle la « famille Kanze. » Cette famille est l'une des plus anciennes et, aujourd'hui encore, l'une des plus prospères. Elle a à Tokio son théâtre, qui donne toujours beaucoup de satisfaction aux nombreux amateurs de représentations du « No. » Seami est le fils du fondateur de cette famille, et c'est lui qui a perfectionné l'art de sa représentation, et même, si l'on peut dire c'est lui, qui a créé les principes de cet art. Deux de ses œuvres sont déjà connues depuis longtemps et sont regardées comme des trésors. De plus, récemment, comme j'ai dit tout à l'heure, on a découvert quatorze autres œuvres composées par lui; et comme, parmi ces œuvres, on en a trouvé quelques unes qui exposent l'essentiel de l'art du « No, » on peut imaginer la grande joie éprouvée par les savants japonais lors de cette découverte.

J'ai l'intention simplement, ici, Mesdames et Messieurs, d'exposer brièvement les théories de Seami concernant l'art du « No » et par là, d'attirer la curiosité des Occidentaux sur les œuvres précieuses de ce grand artiste japonais.

Seami dit tout d'abord que « tout jeu d'acteur est une imitation » (Singakudangi). Il ajoute: « Bien qu'il y ait beaucoup à imiter dans ce que l'on voit autour de soi, il faut tâcher d'arriver à tout imiter: car c'est notre idéal de tout imiter. » Mais quel est l'essentiel de l'art de l'imitation? En réponse à cette question, Seami dit qu'il faut d'abord devenir la chose elle-même qu'on veut imiter et qu'il faut ensuite imiter les mouvements. Il faut faire les chansons, les danses et les gestes qui en dérivent naturellement. Si vous voulez imiter une femme, tenez vos reins droits, maniez vos bras un peu longuement, posez votre corps sans raideur, n'ayez pas d'émotions fortes dans votre cœur, tenez votre corps flexible, et puis faites sortir les danses, les chansons et les gestes de cette transformation de vous-même » (Gakushū jōjō). Mais il ne faut pas laisser voir, dans cette imitation, la volonté d'imiter. « Il faut dans l'imitation, » dit Seami, « quelque chose de non-imité. Si l'on étudie profondément l'art d'imiter, et si l'on réussit à devenir la chose imitée elle-même, alors il n'y aura plus la volonté d'imiter » (Kadensho betshi kuden). Seami fait encore une remarque très importante sur l'art de l'imitation. Comme vous savez, le « No » est un art et n'est pas la réalité, donc, il faut naturellement maintenir toujours quelque distance entre l'imitation et la réalité, quoique l'on doive imiter complètement la réalité. Seami nous dit: « Il faut avoir toujours de la réserve dans le « No. » N'oubliez pas de conserver des sentiments calmes, même quand vous voulez faire des gestes de colère. Par ce moyen on peut éviter d'être brutal. N'est-il pas très artistique d'être calme quand on est en colère? . . . En même temps, c'est parce que toutes les danses doivent toujours être en action et qu'aucune imitation ne doit conserver longtemps la même pose. Faites donc attention à votre démarche: quand vous agissez avec force, marchez lentement: quand vous frappez du pied, tenez votre corps bien calme » (Kaden betshi kuden). C'est bien là le caractère japonais, qui exige rigoureusement une chose, mais qui n'est jamais troublé par ses exigences.

Toutes ces remarques sur l'art de l'imitation sont communes, je pense, à tous les arts d'imitation. Mais les remarques suivantes sont surtout propres au « No. » Toutes dérivent de la loi principale du « No, » à savoir la loi qui fait saisir l'essentiel dans nos mouvements. Par exemple, Seami dit que, bien qu'il y ait un très grand nombre de types d'hommes à imiter, cependant, en fin de compte, il n'y en a que trois. Voici ses propres paroles à ce sujet: « Bien qu'il y ait beaucoup de types humains à imiter, il n'y en a que trois à étudier pour avoir un art excellent; ce sont le vieillard, la femme et le militaire » (Shi kadō sho). Si l'on étudie profondément ces trois types, on peut imiter tous les autres par l'application de ces trois types aux autres. » De plus, Seami dit que même dans ces trois types, on peut distinguer les poses essentielles. L'essentiel des poses de vieillards est d'avoir des sentiments calmes, et de regarder au loin. L'essentiel des poses de femmes est de vivre pour le coeur et de mépriser la force. L'essentiel des poses de militaires est de faire appel à la force et de mépriser absolument le cœur. En troisième lieu, Seami développe cette théorie et il l'étend à tous les gestes du « No. » « Il faut, dit-il, savoir que dans les gestes du « No, » il y a l'essentiel et ce qui en dérive. L'essentiel est la fleur et ce qui en dérive est l'odeur de cette fleur. C'est comme la lune et son ombre. Si l'on tient fermement l'essentiel, on peut obtenir mécaniquement ses dérivés. Ceux qui connaissent vraiment le « No, » regardent le « No » avec leur cœur; ceux qui ne le connaissent pas, le regardent avec leurs yeux. Ceux qui le regardent avec leur cœur, voient ses dérivés. . . . N'imitez jamais les dérivés, parce que ce n'est pas nécessaire; sachez qu'imiter l'essentiel, c'est imiter ses dérivés » (Shi kadō, sho). Ainsi dans le « No, » les gestes corporels deviennent les symboles de notre cœur, c'est à dire expressions directes de notre esprit.

Les occidentaux, qui peuvent goûter cet art excellent, remarquent souvent un côté spécial dans le « No. » Ils remarquent sa lenteur, et regardent cet élément comme son élément essentiel, et appellent souvent le « No » l'art au ralenti. En vérité les acteurs et les amateurs du « No » connaissent très bien la valeur profonde de la pause, ou le silence dans le jeu. Seami a parlé souvent de ce caractère dans les indications qu'il donne à ses élèves. Quand il traite de la relation qui existe entre les paroles et les gestes, il établit ce principe: « Écouter d'abord, et voir ensuite. » Et il explique ainsi sa théorie: « Si l'on fait les gestes en même temps que l'on exécute le chant, ou si l'on fait les gestes avant de chanter, on commet une faute. Si l'on dit d'abord au spectateur ce que celui-ci doit écouter, et si, après un intervalle, on fait les gestes, la relation qui doit exister entre voir et écouter sera parfaite » (Gakushū jōjō). De même, quand il donne ses avis concernant les relations qui doivent exister entre la danse et le chant, il dit, « Ne donnez pas à penser à vos spectateurs que votre danse sort de votre voix. Le goût exquis se trouve dans l'intervalle de transition de la nuance de la voix à la danse » (Gakushū jōjō). Mais là où il s'explique amplement, c'est quand il expose sa théorie de réunion de tous les moments d'une pièce par un esprit. Écoutez ce qu'il dit: « Le chant, la danse et les gestes, voilà tout ce que nous faisons par imitation. Mais il y a la pause pendant laquelle on ne fait rien. Il faut remplir cette pause par l'esprit. Pause pendant la danse, pause pendant le chant, pause pendant la parole, pause pendant l'imitation, il faut faire bien attention de ne pas relâcher votre esprit lors de ces pauses. Cette continuité d'esprit charme le spectateur. Mais ne faites pas paraître cette attention. Si elle paraissait, elle deviendrait un geste. Ce n'est pas le néant d'action, c'est une tranquillité de cœur, quelque chose de distrait, et qui se cache même aux acteurs. Il faut remplir la pause par cette tranquillité d'esprit. Par ce moyen, on peut réunir tous les moments d'une pièce » (Gakushū jōjō). Ainsi vous savez que même par cette pause on peut faire d'une pièce une entité dans laquelle tous les moments sont bien réunis.

L'extrême finesse de l'art du « No, » où l'acteur de génie peut arriver, est appelée par Seami du mot de « Myōsho. » Seami nous dit: « Myōsho est une image sans forme. C'est sans forme, c'est pourquoi c'est un Myōsho. . . . Si l'on veut dire quelque chose sur lui, on ne trouve rien à dire. L'acteur qui a ce Myōsho sait qu'il l'a, et c'est tout. Il ne sait pas où est son Myōsho. Il ne le sait pas, c'est pourquoi il a le Myōsho. Cependant, il me semble que Myōsho consiste dans l'extrême finesse du « No, » grâce à laquelle l'artiste est devenu le talent même, grâce à laquelle il vit dans la tranquillité de cet art extrêmement fin, sans être jamais troublé par son acte, — en d'autres termes, grâce à laquelle l'artiste ne pense rien et ne fait rien par sa volonté » (Gakushū jōjō). Il dit encore en un autre endroit, « Un sutra bouddhique dit que les choses et le vide, c'est la même chose. Dans tous jeux du ‹ No, › il y a toujours les choses et le vide. Après une minutieuse étude de son art, l'acteur en arrive à un état d'esprit paisible où tous les drames du ‹ No › sont devenus des paysages dans son cœur, et alors cet état mental est bien ce que dit le sutra bouddhique, c'est à dire, que les choses sont alors devenues le vide. Mais si l'artiste pense qu'il arrive à cet état mental il n'a pas encore obtenu le nirvana, parce qu'il craint de sortir de cet état. Quand il n'a plus cette crainte, quand son jeu est si fin que l'on ne peut rien critiquer en lui quoiqu'il fasse quelque geste en dehors des règles, c'est alors que se réalise la parole bouddhique, à savoir que le vide et les choses ne font qu'un. . . . Si son art est tellement raffiné qu'il est devenu le talent même, . . . alors il n'y aura plus rien d'artificiel dans son jeu, — alors, l'artiste ne fait plus rien pour montrer, alors il éprouvera des sensations sans sensation et des visions sans vision. L'artiste du ‹ No › qui atteint cet état de finesse est bien le champion du jeu du ‹ No › »

(Yūraku shūdō kenfū sho). En fait, l'artiste qui est devenu si habile, voit son art confondu avec la nature, il est délivré de son moi et il se confond avec l'immense univers. Écoutez encore les paroles de Seami: « Un poète a dit: Bien que l'on creuse le tronc d'un cerisier, on ne peut y trouver des fleurs, quand même le cerisier fleurit au printemps. L'origine de toutes les pièces est notre cœur qui sent tout. Comme la nature fait sortir du tronc sans couleur les fleurs du cerisier, l'artiste de génie fait sortir de son cœur toutes les pièces. L'air, la lune, la fleur, l'oiseau, tous sortent de son cœur. Ainsi la nature fait naître devant nous suivant les saisons, la fleur, la neige, la lune, la mer et la montagne. Il est heureux que l'artiste parvienne à cette extrême finesse où il peut faire jouer toutes les créatures de l'univers, où son cœur est une créature comme l'univers, et où il peut vivre dans la tranquillité de l'air immense et sans limite » (Yūraku shūdō kenfūsho).

Je pense que cette dernière pensée de Seami, la philosophie de l'art du « No, » est un peu compliquée pour vous occidentaux, parce qu'il s'y trouve renfermé trop de pensée bouddhique. Je vous l'expliquerai, en citant un exemple. Aux représentations des pièces du « No » on ne se sert pas du rideau. Au commencement d'une pièce, vous serez frappés par le sentiment du néant, c'est à dire par le sentiment du vide, en voyant la scène tout vide. Puis, peu à peu, vous verrez les musiciens et les chanteurs se présenter sur la scène. Vous sentez que quelque chose sort du néant. Votre attention augmente peu à peu et enfin, au bon moment, vous verrez l'acteur se présenter sur la scène. D'abord il ne parle pas, il ne danse pas, il attend le point extrême de votre attente. Il marche, il chante, voilà que le drame commence. Vous verrez alors les diverses phases du drame humain se dérouler sur la scène. Puis l'acteur quitte la scène, et puis, peu à peu, après lui, les chanteurs et les musiciens se retirent. Vous verrez alors la scène laissée vide. Le rideau ne tombe jamais. Vous avez vu les choses sortir du néant, — vous avez vu la vie humaine s'écouler, — vous avez vu enfin tout retourner encore une fois dans le néant. Ainsi vous pouvez remarquer que la pensée bouddhique fait le fond du « No. »

Je donnerai donc du « No » cette définition: « Le ‹ No › est une espèce d'art d'imitation qui expose la philosophie bouddhique par les sentiments artistiques japonais, et dont les moyens de jeu, symboliques, pleins de pauses spéciales et purement japonaises, sont tout à fait propres à lui. » Pour goûter cet art, il faut bien comprendre la philosophie bouddhique, en même temps qu'il faut renoncer à notre attitude habituelle de regarder le drame normal,

où les acteurs parlent comme nous parlons, font les mêmes gestes que nous, mais qu'il faut savoir la valeur des gestes symboliques et des silences pendant les jeux.

Il y a dans les écrits de Seami bien des endroits que je ne peux comprendre, et qui contiennent sans doute encore beaucoup de théories très intéressantes. À dessin, je n'ai pas parlé de celles de ses théories qui, tout en offrant un certain intérêt pour l'étude du théâtre japonais en général, n'offrent pas d'intérêt spécial pour l'étude du « No. » Je vous demande, Mesdames et Messieurs, mille fois pardon de n'avoir pu mieux faire pour vous exposer complètement les théories de cet acteur de génie.

OBJECTIVE FORM AND ITS RÔLE IN AESTHETICS

Ivy G. Campbell
(*Wells*)

A BEAUTIFUL object, that is, one having beautiful form, is one in which the internal form is adequately housed in an external form. The act of artistic creation is that of fitting these two forms together. When this combination of forms has taken place we have objective beauty, for in the result we see the marks of logical necessity which are what give a thing objectivity. There is in a beautiful object a convincing suitability, an inevitable fitness of part to part, which gives it the characteristics present in any true whole. These characteristics, namely, self-containedness, self-maintenance, self-evidence, are those found in any logical system whether that system be merely a single syllogism or a universe. And they are the characteristics invariably found in a beautiful object. For a beautiful object is one which is exhaustive within itself, its complete being is in the immediately given. There is no reference beyond itself. The type of relationship, then, which is present in a beautiful object is that found in other thought constructs; but whereas, often, as in a syllogism, the marks of a true whole are kept, provided only the form of the relationship is correct, in the case of a beautiful object the content must be of a certain kind and it too must be formed. This content may be conceived as having two members which are related in the way of logical fitness just described. These members will be called external and internal forms and it will be argued that the objectively beautiful form is the resultant of the combination of these two.

By form is meant proportion, harmony, order: in other words, form means that each bit is in its proper place and that there is no bit too much nor yet too little. That which is formed can have said of it what Pennell says of Whistler's etching, the "Black Wharf," "Every single line has a meaning, and there is not one too many and if one were taken away there would be a break in the design." This sort of necessity of part to part, of part to whole, and of whole to part is what gives these marks generally assigned to a beautiful work of art, for example, balance and unity. But balance and unity in a work of art are not entirely or even mainly, as is so often supposed, merely a matter of the medium. In painting, however unified and balanced, the plastic means — line, color, light, space — may be, that is, however perfect the objective external form is, unless there is joined to it an equally unified and balanced internal form, we do not have the harmony which makes a picture truly beautiful. The significant or beautiful form of a given work of art is due to the fitness of just this particular external form to just this particular internal one.

The internal form of an object is just that object's essential meaning. It is that which makes it what it is; that which differentiates the being of one thing from that of another; that which gives it its essence. In a sense, it is the Idea of the thing. In an object of art it is the vision of the artist, the fusion of emotion and thought which has taken place in his soul. It is the formed reality which he has created out of his impressions, — these impressions which, just because they are those of an artist, are so infinitely varied and revealing. When an artist has his emotions and ideas formed into a definite, determinate conception; when all of the thoughts and emotions which bear upon his conception are so ordered that they take upon themselves the inevitable relationship of necessary part to part, then it is that we have a truly artistic vision, an internal form.

But artistic vision, internal form, is not in itself beautiful. For this we must have the vision take on the flesh of an external form. When this occurs we have a unity which in a sense is an identity, for in the sweep of a certain pictured line we have as much the essential being, internal form, of the wind as we do in an actual storm at sea. And in the joy music of Beethoven's Ninth Symphony we have the veritable being, the true internal form of joy. In order to realize this unity in a work of art the artist must have the gifted perception which will enable him to find and to realize that form of line or sound or movement which in itself has the expressiveness relevant to his vision. As has been said of Sibelius, "It is as though Sibelius were so sensitive to the quality of his native earth that he knows precisely in what black and massive chords lie the silence of rock and clouds." [1] It is not that these chords *suggest* the "ruggedness and nakedness of a Finnish winter." It is that they in themselves have that quality which is also that essential in the being of a stark winter. Their intrinsic expressiveness is appropriate to the artist's vision. The overpowering vision which Beethoven has given us in the Fifth Symphony could not be in any other combination of sound than that in which we find it. His burning conception of Fate is exactly that which can be developed from the forms of sound inherently related to that first theme motive: g,g,g,e flat, etc. Roerich's vision of the Spirit of Man as being truly free when he lives and communes intimately and reverently with nature could only be — as Roerich so well saw — beautifully and convincingly given in the external form of the Himalayas.[2] A monk reading under southern Italian skies could not give us such a vision of man as does this Thibetan monk seeking even in the face of nature's sublimest heights the inspiration of man's written word of God.

That the artist's vision, the internal form, must take on an external form is an essential point which is slighted in the well-known theory of B. Croce. For Croce it would seem that when an artist has reached that stage in the aesthetic process which is here called artistic vision, creation of internal form, he has created beauty, for he has done that which is essential for aesthetic creation, namely, he has formed his impressions, or in other words given Expression. But this is only one step in the process of the creation of a beautiful object. It has not yet reached the result which can be called Expression. To have this the artist must have the sensitivity to discover an external form which will so combine with his artistic vision that the result will be a beautiful, objective form. In doing this we have true artistic expression. And without this his creation has not entered the realm of Beauty, for however perfectly ordered a thought or an emotion may be, until manifest in sensuous form it is not beautiful.

In art, the external form used is a sensuous or — as it is generally called — a perceptual one, but it is just as much formed as is the internal. Its parts are integrated with just as much inherent necessity as are the parts of a syllogism. It is as Bosanquet has so well said, "The rhythm that completes a rhythm, the sound that with other sounds satisfies the educated ear, the color that is demanded by a color scheme are, I take it, as necessary and as rational as the conclusion of a syllogism." And external forms have this necessary relationship of part to part not through the creation of an artist but through the logic of the external. An artist cannot take the eternal forms of line or color or sound and do arbitrary things with them. He can only do with them what their natures allow. These lines and colors and sounds are already members of an ordered system which must be respected. An artist can no more disregard the logic of color than a mathematician can that of the number system.[3] Both are equally objective.

External forms may then be defined as formed sense data and they are forms that are given, found; not forms created by the individual associative processes of a subject. That sense data exist as ordered, and that it is as so ordered that they are first given to us, is one of the most significant contentions of the new Gestalt-Psychology.[4] This contention is completely opposed to the whole sensationalistic and associative psychology which finds sensations as such the immediately given and which makes processes of association or apperception those which lend order to this mass of unformed brute immediacy. According to the Gestalt-Psychology man does not cut out of a homogeneous unformed mass bits or constants which he then synthesizes into wholes: rather he finds already unified and configurated structures. The objects which man perceives are not things created through his desires, interests, or needs: they are primitively given entities which attack him. Sense data, then, are not single, isolated bits; they are forms. There is no such thing as an existing bit, red color; there is only color red on a background: there is no such thing as an existing tone c′; there is only c′ in a given determinate pattern. And this not because of a sense of subjective expectancy joined to the given bit but because of the objective existence as such. But although sense data exist as formed, the "goodness" of these forms varies. In the writings of the Gestalt psychologists, although there seems to be no agreed-upon definition of the "goodness" of a Gestalt, its resistance to distortion by its environment is a characteristic very often emphasized and this is a characteristic which has great significance for use in art, for it is the relative difficulty or ease with which these forms are combined or broken down that determines their structural use in design.

Only a brief statement of some of the experimental findings upon which the Gestalt-Psychology bases its arguments for the objective order of sense data can here be given; and those findings bearing most directly upon art will be selected. Many perceptual experiences, for example, movement and depth, which had formerly been explained through associative processes, — either physiological or psychical, — are shown to be undivided, immediately given perceptual wholes, configurations, Gestalten. That movement is such a whole is argued from many facts which have come out of the experiments,[5] most notable of which is perhaps the convincing proof that perception of movement cannot be due to eye-movement experiences because it occurs with exposure times that are shorter than those required for eye-movement. Disparate images and associative kinaesthetic processes are shown to play a very small rôle in depth vision; the important element in this perception being configurational laws and tendencies.[6] Different forms are found to vary in their fusion times,[7] and these times vary according to the simplicity and firmness of the forms. But a geometrically simple figure need not be perceptually so; a circle will fuse at a rate that will give flicker for a triangle. Also a triangle seems to enter into larger configurational patterns with more difficulty than does a circle. Forms, which, because of their frequent use in experience, might be expected to enforce themselves upon vision, often do not do so, but are easily overcome by "primary tendencies of unit formation."[8] That a certain group of lines is constantly seen in every-day experience, as the letter M, does not cause it to be seen as such when it can just as well be seen as a more primitive optical one.[9] Such primitive units, such concrete forms, "are simply there in vision, not less than colors and brightnesses,"[10] and even though experience may be successful in overcoming them for a time, yet "in the first moment of relaxation or fatigue, you instantly see the spontaneously existing groups as before."[11]

Further experimental evidence for the dictation to perception of external forms may be summarily stated as follows. Objects tend to group themselves in determinate ways; visual ones through the principle of similarity rather than nearness, while of auditory stimuli just the reverse is true. Spatial grouping is according to certain laws of objective proportion. There are certain forcefully directed pervading lines which assert themselves very powerfully to vision and will insist upon being completed even though by so doing they destroy the integrity of other less stable near-by forms.[12] Some forms have the tendency to draw neighboring lines toward them: zones of influence Wertheimer calls these. The right angle is such a form and yet this is said to occur as such very rarely in experience. There is a tendency for certain lines to become enclosed, thereby effecting certain forms.[13] Different forms have different intrinsic manners of movement.[14] Certain chordal forms lend themselves more readily to melodic patterning than do others which may be called more introverted.[15] The sense of interval in music — both that of diatonic and of equal — is based upon objective balance or proportion of sound volumes.[16]

Such experimental evidence as this just given enforces the argument that external formed sense data do exist and that there are objective laws of their relationships. It is these external forms and laws that an artist must respect in seeking to give body to his vision. And in great art we observe such respect; not because the artist has reflectively and calculatingly deduced and used these forms but because he has had the gifted perception to find them. His great sensitivity has opened to him a world to which most of us are blind. But artists, and even epochs, one may say, differ in the forms which they observe. Modern art uses new external forms not because modern artists have created them but because they have a different perception. With the fresh and new visions which these artists have created they become sensitive to forms not previously seen. It is noteworthy that when internal forms, due to the new ideals and conceptions of a given age, such as at the present time, are being born, so too are new external forms discovered. But this is only to be expected if, as has been argued, external forms have intrinsic expressiveness and inherent suitability for the embodiment of certain visions.

In this short paper only a few examples of the use of dictatory external forms in art can be given, but it is quite evident that such principles as those revealed by the Gestalt experiments have been considered in the construction of great works of art. For example, the laws of proportional grouping, of visual grouping by similarity, of pervading lines and forms, of tendency to enclosedness, of objective balance: these, and others must be and are observable in such works. In the superb management of masses by such different artists as Fra Angelico and Rembrandt we see triumphant examples of proportionate grouping. And in Fra Angelico, just as in such a modern painter as Seurat, we have singularly successful use of the principle of grouping by similars. In Botticelli and in Raphael we see the force of the pervading line; but, whereas in the former this end is gained through actual line, that characteristic line which gives the fluidity and graceful ease to his pictures, in the latter it is largely done through color motives.[17] In much of the art of the Greeks and of Michelangelo we see the tendency for lines to enclose and give certain forms. Very often the lines used by these latter two are those of parallel diagonals. This external form of a pair of parallel diagonals is one with great structural possibilities, for it is one that asserts itself most powerfully. The use of this form to give convincing unity to a group is seen in Michelangelo's Medici Tombs. One might say that it is the repeated use of this form, together with its tendency to give the sense of an enclosed parallelogram that gives to those groups a sense of utter immovableness. As one moves about these figures different parts of the statues seem predominant to vision but always they fall into this form. Not only is the *use* of this external form and its inherent relationships seen in such an art as that of Michelangelo's but also its intrinsic expressiveness is here shown. The fine serenity and high detachment which are his vision of Death are appropriately embodied in these forms which in themselves have a self-completed and unattached reality.[18] In this sacristy devoted to the dignity of Death all of the expression, both that of spiritual vision and that of carved marble, is that of calm and repose: of a thing completed, of a thing eternally itself. Such always is Objective Beauty. In another statue of Michelangelo's — that of the slave in the Louvre — we see the same diagonal form used and to the same end. Although in this statue there is the suffering from the weight of an inevitable and unending slavedom, it is not a temporal suffering but one transfixed into an eternal verity. And the enclosed parallel diagonals, seen in the upturned arms, also intrinsically possess this utter finality. This principle of enclosedness is very striking in much modern music where the reiteration of a chord gives effects quite different from those when patterns of chords are used. In Stravinsky's "Fire-Bird" his well-balanced, rather individual chord, composed of a series of fourths and fifths, is used in this way.

One of the most convincing proofs that artists are sensitive to these external forms is seen in the use of the principle of distortion in painting, that principle whereby great art proclaims its indifference to the actual shapes of the natural world and shows that art can never be representative. The distortion of human figures for the sake of plastic design is, as is well known, constantly seen in the art of Egypt and in the pottery designs of the Greeks. Perhaps in modern painting Giotto, El Greco, and Cézanne most impressively show us this distortion.

Direct expressiveness of sense forms is perhaps best seen in music. That the minor scale is sad while the major is more joyful cannot be verified by a study of comparative music, but at those epochs when music is not bound down by such a paucity of modes we see forms used which are more directly expressive. We often feel in listening to Plain Chant melodies[19] or to folk songs[20] that the old mediaeval writers who ascribed to each mode a certain atmosphere were correct in so doing. And in the use of those modes in modern music we feel again these ancient atmospheres. In modern music where not only the old modal forms, but many borrowed from the richness of the East, are used, we have indeed great possibilities of matching sound and thought. And if we turn to Eastern music itself as it is exemplified in East India where the modes — ragas as they call them — number in the hundreds, we have an almost absolute equivalence of internal and external. Yet not only does the East Indian prescribe what emotions and thoughts shall be expressible in the different ragas, but also he feels that only certain ragas are appropriately used at certain hours of the day.[21] Once when a night raga was sung at mid-day, darkness came down upon the land. Perhaps this legend illustrates better than can any words the theory here developed, that in art the internal and the external must be a logical whole.

NOTES

[1] P. Rosenfeld, *Musical Portraits*.

[2] A picture by Roerich in the Roerich Museum, New York City.

[3] Take such an experimental finding as that yellow is more forceful than blue partly because it is more "thingly." W. Fuchs, "Experimentelle Untersuchungen über das simultane Hintereinandersehen auf derselben Sehrichtung," *Z.f. Psych.*, 91, 1922. Note also the work on surface, film, and bulky colors. D. Katz, "Die Erscheinungsweisen der Farben, etc." *Z.f. Psych.*, 7, 1911. M. F. Martin, "Film, Surface and Bulky Colours and their Intermediates," *Amer. Jour. of Psy.*, 33, 1922. D. W. Ross in his book "On Drawing and Painting" points out that the old masters considered that the usableness of colors depended upon their intrinsic characters. The writer suggests that the effects obtained by the use of flat tone in the paintings of the Japanese and the early Florentines was due to the inherent possibilities of surface color, while in such use of color as that of Cézanne we have respect given to film and bulky colors.

[4] See especially W. Köhler, *Die Physischen Gestalten* and K. Koffka, *The Growth of the Mind*. Also a series of articles by H. Helson in *Amer. Jour. of Psy.*, 1925, 1926.

[5] See especially M. Wertheimer, "Experimentelle Studien über das Sehen von Bewegung." *Z.f. Psych.*, 61, 1912, 161–278. F. Kenkel, "Untersuchungen über den Zusammenhang zwischen Erscheinungsgrössen, etc.," *Beiträge zur Psychologie der Gestalt*, edited by K. Koffka, 1919. E. Lindemann, "Experimentelle Untersuchungen über das Entstehen und Vergehen von Gestalten," *Psych. Forsch.*, 2, 1922, 5–60.

[6] E. Lau, "Versuche über das stereoskopische Sehen," *Psych. Forsch.* 2, 1922, 1–4 and "Über das stereoskopische Sehen," *ibid.*, 6, 1924, 121–126.

[7] L. Hartmann, "Neue Verschmelzungsprobleme," *Psych. Forsch.*, 3, 1923, 319–397.

[8] W. Köhler, "An Aspect of Gestalt-Psychology," *Ped. Sem.*, 32, 1925, 691–723.

[9] M. Wertheimer, "Untersuchungen zur Lehre von der Gestalt," *Psych. Forsch.*, 4, 1924, 301–350.

[10, 11] W. Köhler, *op. cit.*

[12] M. Wertheimer, *op. cit.*

[13] *Ibid.*, and Köhler, *op. cit.*

[14] M. Wertheimer, "Untersuchungen zur Lehre von der Gestalt," III. "Experimentelle Untersuchungen über phänomenale Identität," by Josef Ternus, *Psych. Forsch.*, 7, 1925, 18–137.

[15] Result from a yet unpublished research of the writer.

[16] R. M. Ogden, "Hearing." H. J. Watt, "The Psychology of Sound" and "The Foundations of Music."

[17] It is through the use of repetition or gradation of a color that Raphael does this. In some pictures as in "Le Sibille" in S. Maria della Pace in Rome this is used with such contrapuntal power that it seems almost too striking but in most of his pictures it is completely satisfying, as in "La Disputa del Sacramento" in the Vatican and in "Le Deposizione" in the Borghese gallery.

[18] In the figure of Dawn, as it is popularly called, we do not have this sense of spiritual repose and it is notable that here Michelangelo uses as the dominant line, not a straight but a serpentine one, a line which has in itself less of a completed thing. Thus in the individual figure we have an appropriateness of vision and line but with a loss to the unity of the group as a whole.

[19] See F. Burgess, *A Textbook of Plainsong and Gregorian Music,* for a statement of the different atmospheres considered appropriate for the different modes.

[20] See especially L. A. Bourgault-Ducoudray, *Trente Melodies Populaires de Basse-Bretagne.* In the analysis of each of these songs he shows how perfectly matched are the modes and the songs. He finds the two most common modes to be the Hypo-Dorian and the Hypo-Phrygian, which are those which he says were used in antiquity in the cults of the two inspirers of all music, Apollo and Bacchus. The serenity and harmony which are represented in the first of these two gods as well as the enthusiasm and the delirium of the second find echo in the two modes. Such a use is also seen in these folk songs of Brittany.

[21] See H. A. Popley, *The Music of India.*

SECTION 3

Time: Thursday, September 16, 9.30 A.M.
Place: Smith Hall Common Room
Subject: Aesthetics. Philosophy of Law
Chairmen: NORMAN WILDE, Minnesota
THOMAS REED POWELL, Harvard

THE FOUNDATIONS OF AESTHETICS

ETHEL PUFFER HOWES
(*Smith*)

THERE is a very striking contrast to be observed between the present situation and stated aims of philosophy in general and that branch of philosophical thinking to which we give the name Aesthetics. It is to be noted here. The trend, for instance, of yesterday's discussion was to stress the integrative and regulative function of philosophy in human affairs, — philosophy as the return movement of culture on itself. Yet this is very slightly the case as regards aesthetics. We do not find an aesthetics current, or even sought, as integrative and regulative of works of art, or the experience of beauty. We do not find it as the background of criticism, or as the touchstone of new or novel appearances in the field of artistic endeavor.

Yet nowhere are the results of the lack of a controlling principle — or rather the lack of a consciousness of the need of a controlling principle — more obvious. Extraordinary, it seems to me, is the complacency with which now one, now another, of our poets, novelists, and journalists (and by "our" I mean at least our English-speaking world's) breaks into print with what they present as a fire-new and world-shaking theory of poetry, rhythm, pictoral art. Since we are supposedly all professionals together, I may venture to refer by name to one or two of the outstanding instances. Where, except in a community utterly unregardful of any aesthetic responsibility, could there be a wide, not only popular, but critical, vogue for Mary Austin's theory of rhythm in poetry, Conrad Aiken's, Robert Graves's pronouncements on general aesthetics, Clive Bell's formula for visual art?

I should like to lay down the thesis that the first desideratum of an aesthetic theory is that it should furnish a principle through which we can at least approach a method of discrimination: and that the second desideratum is that it should be fruitful in the field of scientific explanation — in our case, in the field of psychological explanation.

After all, what we are seeking is the quality of beauty, that is, of aesthetic value. Of the myriad examples, let us say, in a given field of expression (all of which doubtless have come into being through the same general impulse to expression), some will possess this quality, others will not. Of the flood of Elizabethan lyrics, a dozen have the Shakespearean quality.

What is it that they have that the others have not? What is it that makes a six-inch fragment of a Praxitelean torso (I have seen such an one here in your museum) worth all the other sculptural examples put together? Not that I would presume to answer this question — but it is not a rhetorical one. How do they differ from one another in glory? The aesthetic theorist who does not see that this *is* the question of aesthetics seems to me blind; and the theory which does not at least put me in the way of seeing the answer to the question afar off, is on the wrong track.

This would be my reason for repelling Croce's theory of Art and of Beauty — that it is utterly sterile in the field of discrimination. It makes no provision for the only thing in which the aesthetic object is distinctive — its *relative* superiority; and it is sterile in the field of psychological explanation. Even Mr. Carritt, the English aesthetician on the whole most sympathetic, admits that Croce allows no discrimination in his intuitions. But if not, then the whole field of art becomes one chaotic welter of expressions. It is the very negation of the possibility of aesthetic value. And of the practical result of this theory we have a very present example in the vagaries of modern art. It is clear enough that "expressionism" derived its aesthetic justification ultimately from Croce. Whatever is expressive of anything is accordingly legitimate art — in short, "anything goes." So with all the more outrageous forms of modern literature. So far as they are experiments seeking new forms, we may welcome them. As a student in another field said — "No experiment is a failure, for we learn something from it." But as something that claims recognition as of right within the realm of art, it points back straight to Croce's virtual denial of any *quality* of value.

I have sometimes played with the notion that in Browning's "My Last Duchess" (a poem youthfully adored) we have the *reductio ad absurdum* of the Crocean aesthetics. You remember that irritating lady — "she liked whate'er she looked on, and her looks went everywhere."

> Sir, 'twas all one! My favour at her breast,
> The dropping of the daylight in the West,
> The bough of cherries some officious fool
> Broke in the orchard for her, the white mule
> She rode with . . .

So

> . . . I gave commands;
> Then all smiles stopped together.

Well, who shall say that as a student of beauty and of art, dedicated to the practice of discrimination, the Duke was not aesthetically justified?

I have dwelt so long on the Crocean formula because of the all but hypnotic influence which his name seems to carry among our younger critics, — and because of the actually hypnotic influence on their critical faculties. The practical result of the Crocean aesthetics is completely defeatist so far as the exercise of the active function of criticism is concerned.

Not, of course, that Croce has bound himself at all by the logical consequences of his theory. No critic, perhaps, is freer with harsh words of disapproval. But I, at least, have sought in vain in his critical papers that I have read, for any explicit application of his aesthetic theory.

Somewhat the same failure is to be noted for the psychological theory of *Einfühlung* or Empathy. This has been immensely fruitful as regards my second desideratum of psychological explanation. But it has failed to furnish an adequate principle of discrimination and as I wish to return to it later I will limit myself to this note here.

Kant's analysis of the aesthetic judgment as free, disinterested, purposive without being bound by a definite end, is no doubt the "first rational word" concerning beauty. It is not adequately seen, I think, how closely Schiller's "play impulse" is bound up with this. Many writers on aesthetics, taking the word alone, give it a concrete psychological interpretation, bringing it into the field later cultivated by Groos, whereas it for Schiller meant no more than what Kant meant by "free, disinterested," not bound by any end or obligation. Schiller's real advance on Kant's thought seems to me rather in his formulation of beauty as "the vindication of the possibility of perfection." But, however we may think we see today the way to descend from these philosophical heights to a concrete theory of aesthetics, we cannot assert that the step was ever taken. Schelling's reconciliation of Nature and the Self in the aesthetic experience as an equilibrium of the real and ideal factors, Hegel's "expression of the Idea to sense," while acceptable as purely formal schematic designations of the place of the aesthetic in the philosophical scheme, are even more refractory to any linkage with beauty in the concrete.

As Mr. Dewey said yesterday, it is foolish for us to pretend that the philosophy we see as operative is not the one we have chosen for our own. And so I will admit the soft impeachment, that I believe the capacity to furnish a principle of discrimination (a true criterion), and a certain fruitfulness in the field of psychological explanation, is possessed by an aesthetic theory, put forth in a form doubtless immature, a number of years ago — to which, indeed, the author did not then give a name, not having been then wise enough in her own conceit. I imagine it doesn't happen often to writers on philosophy to be baptized by another; if that had not happened to me I should perhaps not have ventured to address this august assembly. But very recently I chanced upon a work entitled *The Foundations of Aesthetics*, by an English philosopher, not only interesting but even amusing, in which my nameless child came in for a qualified approval and was given the name *Synaesthesis*.[1] As it appears to me, however, that this is really not a successfully descriptive appellation, it may be worth while briefly to develop the theory.

What I had made the center of my philosophy of beauty, so far as it was philosophy at all, was this. I defined the beautiful object as possessing those qualities which bring the personality into a state of unity and self-completeness. How those qualities appeared in the Object, how they brought about that state in the person, lay for me within the realm of psychology, and as such offered no problems in any way unique, or insoluble. We need to know only how to translate unity and self-completeness into psychological terms. "The psychophysical organism is in a state of virtual congealment or emptiness, as in a trance or ecstasy; or when it is in a state of repose, without tendency to change. Secondly, the organism is self-complete when it is at the highest possible point of tone of functional efficiency, of enhanced life."[2] The only possible combination of these at first thought contradictory concepts, opposing states, is in the condition of equilibrium, or balance of forces — wherein by hypothesis we are given complete arrest, but tension, aliveness to the nth degree. I quoted in my then exposition L. T. Hobhouse's definition of the nature of an organism as "so built, whether on mechanical principles or not, that every deviation from the equilibrium point sets up a tendency to return to it" and I found in this concept of equilibrium, of excursion from the center, *and return*, a principle for explanation of the details of the elements of picture, poem, drama, symphony, which, each in its own way, leads us on an excursion of experience and brings us back, stimulated to unity and self-completeness.

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[1] C. K. Ogden, *The Foundations of Aesthetics.*

[2] *Psychology of Beauty*, p. 49.

Meredith has a passage, in his *Lord Ormont*, that phrases what I am trying to describe as has no other writer. Aminta's swim "passed up out of happiness, through the spheres of delirium, into the region where our life is as we would have it be; a home holding the quiet of the heavens, if but midway thither, and a home of delicious animation of the whole frame, equal to wings."

Why, then, is Synaesthesis not a good name for this envisagement of the aesthetic experience? Because unity is not enough. What is distinctive in the aesthetic experience is unity through our imaginative participation in the excursion and the return ("*closure*," as the *Gestalt-psychologie* hath it), out of dis-equilibrating elements. This is not even shadowed forth in the term Synaesthesis.

OBERFLAECHEN- UND TIEFENWIRKUNG DER KUNST

Moritz Geiger
(*Göttingen*)

VON zwei Seiten her hat man versucht die seelischen Wirkungen der Kunst und des Schönen zu begreifen: das eine Mal wird von den höchsten Schöpfungen der Kunst ausgegangen, von den Götterbildern des Phidias, von den Symphonien Beethovens, von den Fresken Michelangelos, von den Dramen Shakespeares. Ihre Wirkung gilt als der Prototyp aller künstlerischen Wirkung, als der Massstab, an dem alle Kunstwirkung überhaupt zu messen ist. Man ist von diesem Standpunkt aus unduldsam gegen alles, was diesem Massstab nicht genügt. Man sieht hochmütig auf Wirkungen von Kunstwerken herab, die andern Geschlechts sind. Man empfindet, dass der Moderoman und das Modetheaterstück an andere Instinkte appellieren, andere seelische Kräfte in Bewegung setzen, als jene Werke hoher Kunst — und man verwirft sie darum. Will die Kunsttheorie solche Wertung der künstlerischen Wirkung begründen, so pflegt sie das ästhetische Erleben mit dem religiösen und metaphysischen Erleben in eine Reihe zu stellen. Platos Lehre vom Naturschönen ist das Vorbild der meisten Kunsttheorien dieses Standpunktes geworden: nur insoweit in einem Kunstwerk ein Widerschein des Ueberirdischen zu finden sei, eine Darstellung des Unendlichen im Endlichen, eine Verkörperung der objektiven Idee, — nur insoweit sei es imstande echt künstlerische Wirkungen auszulösen, verdiene es den Namen eines Kunstwerkes. Darstellung des Unendlichen im Endlichen — wie viel davon ist wohl in einem Foxtrott zu finden? — In einer Posse? — In einem Gesellschaftsdrama? Deshalb fort mit ihnen, wenn es sich um Bewertung als Kunst handelt.

Solcher Hochmut ästhetischer Theorien hat immer wieder den Gegenschlag erzeugt. Die psychologisch gerichtete Aesthetik hat sich zum Wortführer dieser Reaktion gemacht. Sie bestreitet, dass eine Kluft existiere zwischen den gewöhnlichen Erlebnissen des Alltags und künstlerischer Wirkung — wir dürfen nicht die Kunst mit Religion und Metaphysik zusammen auf einen unzugänglichen Felsen stellen: die psychischen Gesetze kennen so wenig wie die physikalischen eine Zweiweltentheorie. Es sind dieselben psychischen Gesetzmässigkeiten, die in den trivialsten Erlebnissen wirken, wie in den erhabensten; und deshalb dürfen auch die ästhetischen Erlebnisse nicht von anderm Schlag angesehen werden, als die andern Erlebnisse. Das ist die Meinung der psychologischen Aesthetik. Es ist das gleiche Bestreben, das die psychologische Theorie überall durchzieht. Sie sucht der Hypnose das Wunderbare zu nehmen, indem sie ihre Vorstufen in den Suggestionen und Autosuggestionen des Alltags aufweist: — das religiöse Erlebnis wird von ihr seiner Einzigartigkeit entkleidet und oft in recht bedenkliche Nachbarschaft gerückt. Und das ästhetische Erleben wird demgemäss nicht verschont: die künstlerischen Erlebnisse sind nichts anderes als potenzierte Erlebnisse des Alltags.

Freilich muss die psychologische Theorie nicht notwendig zu diesem Ergebnis kommen. Es liess sich sogar wohl denken, dass etwa die schöpferische Synthese im Sinne Wundts aus der Zusammenfügung auch sonst bekannter Elemente etwas Neues und Einzigartiges zustande brächte, dass man mit Recht abhebt von andern Erlebnissen. Allein die psychologische Aesthetik ist selten diesen Weg gegangen: die Demokratie der Erlebnisse steckt ihr im Blut — sie hasst die Aristokratie metaphysischer Aesthetik. Es klingt fast wie ein Protest gegen die ins Transzendente gerückte ästhetische Anschauung Platos, wenn Aristoteles die Wirkung des Tragischen auf die gar so menschlichen Erlebnisse von Furcht und Mitleid zurückführt. Und mit welcher Wollust, könnte man fast sagen, zieht Fechner möglichst triviale Beispiele zur Analogie für das Aesthetische heran, wie die von dem Geruch des Kuhstalls, der dem Oekonomen angenehm riecht —gerade als ob er sich rächen wollte für die Verstiegenheit, mit der manche Anhänger der idealistischen Aesthetik das künstlerische Erlebnis in den Himmel gehoben hatten.

Zu diesen Gegensätzen der Abscheidung der künstlerischen Erlebnisse von den Alltagserlebnissen einerseits und der Nivellierung der ästhetischen Erlebnisse andererseits gilt es Stellung zu nehmen: Ist es wirklich die unausbleibliche Folge einer ernsthaften psychologischen Erklärung der Kunstwirkungen, dass sie dem künstlerischen Erlebnis jede Sonderstellung rauben? Das Gegenteil ist der Fall: Gerade die unvoreingenommene psychologische Analyse zeigt, dass es Wirkungen der Kunst gibt, die — gewiss aus allgemeinen psychischen Gesetzmässigkeiten verständlich — dennoch die Kunstwirkungen aus dem Alltag herausheben. Unbefangene Beobachtung zeigt, dass es zwei völlig verschiedene Sorten von Kunstwerken oder sogenannten Kunstwerken gibt, die ich als Tiefenwirkungen und Oberflächenwirkungen der Kunst unterscheiden möchte: die Wirkungen der verinnerlichten Schlichtheit eines Rembrandt-schen Porträts, der Uebermenschlichkeit eines Gotischen Doms, der lieblichen Vornehmheit eines Mozartschen Rondos — sie rühren an die Tiefe des Ich, ergreifen das Ich in seinen Tiefen. Schroff hebt sich von dieser Form der Wirkung eine andere Wirkungsart ab: die Oberflächenwirkung; sie ist nicht einheitlich. Der grösste Teil dieser Wirkung geht auf das, was ich als Amüsementwirkung, als Pläsierwirkung bezeichnen will. Eine Posse amüsiert uns, ein „practical joke,“ vielleicht eine Revue. Allein neben den Amüsement- und Pläsierwirkungen gehören noch Wirkungen anderen Typs zur Oberflächenwirkung: Die Rührung eines sentimentalen Rührstücks — mag sie auch noch so intensiv sein, bleibt nur an der Oberfläche des Ich. So auch ist die Lust der Aufregung eines Sensationsdramas, die oberflächliche Spannung eines Abenteuerromans immer eine Lust an der Erregung der Oberfläche des Ich, die weit abliegt von der Tiefenwirkung künstlerischer Ergriffenheit. Für diese Oberflächenwirkungen — aber auch nur für sie — ist die übliche psychologische Theorie in der Tat im Recht: solche Oberflächenwirkung ist verwandt mit Wirkungen ausserkünstlerischer Sphären. Sie rückt die seelische Bedeutung eines Kunstwerks in die Nähe des Vergnügens am Kartenspiel, an Essen und Trinken, am Pferderennen, am Lachkabinett.

In den Extremen ist der Unterschied von Oberflächen und Tiefenwirkung nicht leicht zu übersehen. Niemand wird von der Herbheit Bachscher Fugen Amüsement oder sentimentale Rührung verlangen, niemand, der weiss, worum es sich handelt, von einer Revue oder einer Posse künstlerische Tiefenwirkungen.

Aber unendlich viele Werke hoher Kunst lassen sich zu reiner Amüsementwirkung missbrauchen. Jede Molieresche oder Shakespearesche Komödie kann ohne weiteres dem reinen Pläsier dienen; man kann in Hamlet die Spannung gehäufter Moritaten geniessen und Beethoven ins Sentimentale hinüberspielen.

Es wäre die Aufgabe einer psychologischen Theorie der Kunstwirkungen gewesen, Tiefen- und Oberflächenwirkung deutlich auseinanderzuhalten und ihren Unterschied theoretisch zu begründen. Statt dessen hat gerade die psychologische Aesthetik durch eine selten bestrittene halbwahre Grundthese dazu beigetragen den Unterschied zwischen Oberflächen- und Tiefenwirkung zu verwischen. Von den psychologischen Aesthetikern wird es nämlich meist als die vornehmste Aufgabe der Kunst bezeichnet, dass durch die Kunst Lust, Genuss erzeugt werde. Gewiss — es soll gar nicht geleugnet werden, dass nicht nur die Oberflächen- sondern auch die Tiefenwirkung der Kunst in eminentestem Sinne Lustwirkung ist. Aber Lustwirkung und Lustwirkung ist zweierlei. Nicht Lust schlechthin wird in aller echten Kunst gesucht, auch nicht Genuss schlechthin, sondern Beglückung.

Allein gerade diesen Unterschied von Genuss und Beglückung verwischt man, wenn man die Lustwirkung als die eigentliche psychische Wirkung des Schönen bezeichnet, und man versperrt sich damit zugleich den Weg zu einem Verständnis des Unterschiedes zwischen Oberflächen- und Tiefenwirkung der Kunst. Nur von der Oberflächenwirkung gilt, dass man sie der Lust willen sucht. Wer sich in einer Posse amüsieren will, für den ist Lust in der Tat das Ziel, je intensiver desto besser. Käme es wirklich nur auf Genuss an, auf möglichst intensiven Genuss, so wäre in der Tat nicht einzusehen, weshalb wir in der Kunst noch nach anderen Wirkungen suchen sollten als nach Oberflächenwirkungen. Es gibt jedoch noch andere als blosse Lustwirkungen, und sie sind es gerade, die das Hohe des künstlerischen Erlebens ausmachen. Nicht die Lust als solche ist es, die wir im Anblick der Sixtinischen Decke suchen, nicht Lust als solche wird in den Bachschen Passionen gesucht. Was gesucht wird ist eine Erschütterung des Ich, die uns beglückt. Beglückung, nicht blosse Lust verschafft uns die Tiefenwirkung der Kunst.

Die moderne Psychologie ist — von wenigen Ausnahmen abgesehen — geneigt, Lust und Glück, Lust und Beglückung gleichzusetzen — sie hat die bessere Einsicht der antiken Philosophie in den Wind geschlagen. Viele Richtungen des antiken Eudämonismus, der Kynismus, Aristoteles, die Stoa haben diesen Unterschied von Lust und Beglückung wohl zu machen gewusst. Das Glück war ihnen letztes Ziel des Lebens, aber nicht die Lust. Der moderne Eudämonismus eines Helvétius, eines Bentham, eines John St. Mill und vieler anderer dagegen hat Lust und Glück gleichgesetzt, das Glück in nichts anderem zu sehen gewusst als in einer Haüfung von Lust. Aber noch soviele Lust — noch so viel Lust eines guten Essens etwa — ist nicht imstande zur Beglückung zu werden. Die Wurzeln des Glücks liegen tiefer: Lust geht auf das einzelne Erlebnis, Glück auf den Zustand des Ich. Nur dort, wo das Ich, die Person in den ihm gemässen Gesamtzustand versetzt wird, entsteht Glück. Lust aber, als Erlebnisphänomen entsteht, wenn das vitale Geschehen einen Verlauf nimmt, der den Bedingungen dieses Verlaufs angemessen ist.

Damit ist der Grundgegensatz zwischen Lust und Glück, zugleich aber zwischen Oberflächen- und Tiefenwirkung bezeichnet. Lust ist eine Reaktion der vitalen Sphäre; die Erregung und Spannung des Spiels, die Lust am Essen, die sinnliche Wollust, die Lust an der körperlichen oder seelischen Erregung, sie bleiben im Vitalen —

sie sind Lusterlebnisse, die dem Tier wie dem Menschen gemeinsam sind. Erst die künstlerische Tiefenwirkung geht auf die Person, auf die Sphäre des tiefen Ich. Sie ist auch keine blosse Reaktion auf Reize oder Gegenstände. Sie verlangt vielmehr das bewusstseinsmässige Erfassen von künstlerischen Werten. Wir müssen bewusst den künstlerischen Wert einer Statue, einer Sonate, eines Gedichts in uns aufnehmen, wenn sie wirken sollen. Wir werden die strengen Linien eines Dürerschen Holzschnittes nicht durch vitale Reaktionen geniessen, sondern wir erfassen die Werte des Werkes und werden in unserer Person von ihm gepackt. —

Und nun gilt: Diejenigen Werke, die nur an die Oberfläche des Ich, an seine vitale Seite appellieren, scheiden aus dem Reich der Kunst aus. Wo nur Oberflächenwirkungen, nichts als Oberflächenwirkungen erzeugt werden, da liegt keine spezifisch ästhetische Wirkung vor. Da steht die Freude am sogenannten Kunstwerk in der Tat in einer Reihe mit den Freuden am Spiel, an der Jagd, am Klatsch. Damit scheidet gewiss vieles, vielleicht das Meiste, was sich als Kunstwerk ausgibt, aus. Es gibt viele kunstbegeisterte Menschen, die niemals über die Stufe des Geniessens von Oberflächenwirkungen hinausgekommen sind, die im grössten Kunstwerk immer nur das heraussuchen, was ihnen Oberflächengenuss bringt. Allein Kunstbegeisterung hat mit Verständnis für Kunst nichts zu tun — und ob eine Wirkung eine künstlerische ist oder nicht, darf nicht aus dem Fühlen der Mehrzahl erkannt werden.

Es war nötig diese beiden Arten künstlerischer Wirkung, die Oberflächen- und die Tiefenwirkung zunächst möglichst weit auseinanderzureissen, damit ihr Gegensatz klar heraustrete — jetzt aber müssen die abgerissenen Verbindungsfäden wieder angeknüpft werden. Wo nur Oberflächenwirkungen, wo nur vitale Wirkungen vorliegen, dort darf von Kunst nicht gesprochen werden. Aber dennoch sind vitale Wirkungen nicht etwas, was aus dem Bereich der Kunst verbannt werden müsste. Vielmehr: Wo immer Tiefenwirkungen überhaupt vorliegen, können vitale Wirkungen nicht von ihnen getrennt werden. Wenn auch alle allein vorkommenden Oberflächenwirkungen ausserkünstlerisch sind, so gibt es doch keine Tiefenwirkungen der Kunst, in die nicht vitale Wirkungen verflochten sind, verflochten sein müssen. Mehr oder weniger. Sie sind relativ geringer beim Anblick eines Mäanderbandes oder einer ägyptischen Königsstatue — überhaupt bei den Künsten, die Nietzsche als apollinische bezeichnet hat — sie sind stark in den stürzenden Versmassen des Alexandriners oder in den Rhythmen eines Tanzes, in den erregenden Szenen einer Tragödie.

Diese vitalen Momente werden im Augenblick, wo sie im Zusammenhang mit Tiefenwirkungen auftreten, zu etwas Neuem und Anderem; nun sind sie nicht einfach mehr diese vitalen Momente, in ihrer Auswirkung nicht einfach mehr Oberflächenwirkungen — sie erhalten jetzt eine prinzipiell neue Bedeutung. Ein auch sonst geltendes synthetisch-psychologisches Prinzip tritt hier in Kraft, das die Bedeutung der vitalen Momente verwandelt. Ueberall dort, so lautet es, wo psychische Wirkungen verschiedener Sphären ineinandergreifen, bleibt es nicht bei blosser Addition — die tiefere Wirkung färbt die oberflächliche mit ihrem Geist, zieht sie in sich hinein und wird zugleich auch durch sie bereichert. Das sexuelle Erleben als solches liegt z.B. in der vitalen Sphäre, geht das Ich nichts an als Person. Aber nun tritt zu dem rein sexuellen Begehren das psychische Liebesmoment hinzu. Es vernichtet das Sexuelle nicht und stösst es nicht aus, es steigert es sogar und vertieft es zugleich. Und andererseits gibt das Sexuelle der seelisch-menschlichen Beziehung eine Nähe, Innigkeit und Tiefe, die die unerotische Beziehung kaum jemals erreichen kann.

Das gleiche gilt für das Verhältnis der personalen und vitalen Momente im Bereich des Aesthetischen: die Erregung einer Tragödie ist vielleicht der Intensität nach geringer als die Erregung des Gladiatorenspiels oder auch eines gewöhnlichen Wettkampfes. Aber sie ist vertieft, in eine andere Sphäre gehoben, veredelt durch die Tiefenwirkungen der Tragödie. Und andererseits: Die Tiefenwirkung allein mag leicht blass und dünn und farblos und unlebendig werden. — Aber die vitale Wirkung hebt sie aus der Blässe heraus, gibt dem ästhetischen Erleben die Fülle der Lebendigkeit. Zur Tragödie gehört Erregung, nicht nur Gepacktsein durch menschliche Werte, es gehört zur Melodie Bewegung, zur Malerei Farbigkeit und zum Gedicht Lebendigkeit des Geschehens, der Stimmung, des Gefühls. Nicht ein äusserlich hinzukommendes Phänomen ist die vitale Wirkung, sie durchdringt die Tiefenwirkung, macht sie lebensvoll, gefüllt und gesättigt. So spricht das vollendete Kunstwerk nicht nur zur seelisch-geistigen Person — es spricht zur Einheit von Person und Leben. Es setzt die vitalen Kräfte und die Dynamik der Person in Bewegung. In jeder Kunst in anderer Weise: Anders in der Musik als in der Epik, anders in der Baukunst als in der Malerei. Und anders bei jedem Künstler und in jeder Kunstrichtung: Die klassische Ruhe Raffaels ist anders vom vitalen Moment durchsetzt als die Drehungen Boticellischer Gestalten — anders sprechen sie aus dem saftigen Leben Franz Halsscher Zecher als aus der Süsse Murilloscher Madonnen.

Weil das so ist, gehört zum grossen Künstler sowohl seelische Tiefe als Fülle des Lebens — wo die Vitalität allein herrscht, kommt es nur zu der Mimicry der Oberflächenkunst. Wo nur Tiefe ohne Vitalität sich findet, da besteht die Gefahr in jenes „genre ennuyeux“ zu verfallen, das Voltaire so sehr gehasst hat.

Aber dennoch: Oberflächenwirkung und Tiefenwirkung dürfen nicht in ihrer Bedeutung gleichgestellt werden. Der Zentralpunkt aller wahren künstlerischen Wirkung ist die Tiefenwirkung, die aus dem Erfassen künstlerischer Werte, aus dem Innern der Persönlichkeit stammt. Aber gerade, weil so vieles, was sich Kunst nennt, überhaupt keinen Zugang zu dieser Tiefe hat, wird so leicht übersehen, dass erst mit der Tiefenwirkung die Kunst beginnt. Es klingt so viel weitherziger: Man soll nicht auf die Werke hoher Kunst seine Untersuchungen beschränken, sondern auf alles ausdehnen, was sich als Kunst ausgibt. Man hat, gewiss, wenn man von der Oberflächenkunst ausgeht, den weiteren Vorteil, dass auch der schlimmste Banause die Erlebnisse, die man aufzeigt, bei sich konstatieren kann, da Oberflächenwirkungen sich bei jeder Form der Kunst finden lassen. Und man hat den entwicklungsgeschichtlichen Gesichtspunkt scheinbar auf seiner Seite. Denn es ist klar, dass die echte Kunst sich erst aus Oberflächenwirkungen entwickelt hat — und man kann scheinbar auf diese Weise die Kunst zurückverfolgen bis ins Tierreich: man kann mit Prinzipien vitaler Art, wie etwa: Kunst ist Spiel alles zu umgreifen glauben, von dem Sichbalgen junger Hunde bis zu dem Genuss von Dantes Divina Commedia. Man kann das alles, weil man die Augen zugemacht hat vor dem, was gerade den Genuss der Divina Commedia vom fröhlichen Sichbalgen junger Hunde unterscheidet, weil man das nicht sieht, was das Wesen künstlerischer Tiefenwirkung ausmacht: Das Glück im Erfassen künstlerischer Werte, das Aufrühren der seelischen Tiefe, das Ergriffensein der Person.

POSITIVISM AND THE LIMITS OF IDEALISM IN THE LAW

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GLORIFICATION of the positive law that *is*, to the disparagement of the natural law that *ought* to be, is characteristic of the reaction that has followed the rationalistic liberalism of the Age of Enlightenment. It may be that this positivism is largely due to the expansion of modern industry and commerce which has caused lawyers to be more concerned with the protection of private economic interests than with the larger issues of social well-being. In any case it is true that since the French Revolution, authoritarian reactionaries like De Maistre, romantic historicists like Burke and Savigny, idealizers of the actual like Hegel, utilitarians like Bentham, and positivists like Comte, have all united to heap scorn on the old liberal doctrine that men can and should change law to conform to their idea of natural law or justice. Even a transcendental idealist like Stammler finds it necessary to pay the usual lip worship to positive law.

It is, of course, absurd to suppose that all ideas of justice can be banished from the study of the law any more than from its administration. What has in fact happened is simply that ideas of justice have lost prestige among jurists and are pursued in an unavowed form. It is therefore easy for positivists like Bergbohm and Neukamp (as well as formalists like Kelsen) to show that other positivists are full of hidden or unavowed natural law. The truth, however, is that positive law is itself an ideal — an ideal which is altogether unavoidable if we are to unite the diverse enactments, miscellaneous decisions, and conflicting practices and opinions into a coherent system from which decisions as to all possible future cases are to be deduced. The law, as Justice Holmes has told us, must ever strive for, though it can never attain, perfect logical consistency. The process of building up such an ideal system by the extension of legal analogies and by rationalizing the grounds of our decisions, is necessarily dominated by ethical premises or rules which claim our obedience and do not lose their validity when they are not obeyed in practice.

The notion that the jurist can dispense with any consideration as to what the law ought to be, arises from the fiction that the law is a complete and closed system; and that judges and jurists are mere automata to record its will or phonographs to pronounce its provisions. But the sober fact is that law, as an actual and continuously changing social institution, is governed by the professional activity of lawyers, judges, administrators, and jurists who make the law in the guise of finding, interpreting, and applying it.

Examine the actual development of the law as regards the rights of property and labor, or the rights of women. Can there be any doubt that judges' ideas as to what is just or necessary for social safety do influence the law? This is likewise true of administrative officials, to the extent that they have power to frame general orders and regulations. So much is this true that the public is generally more interested in a change of administration than in a change of the legislature. Judicial and administrative activity is, however, dependent on, and governed by, juristic ideas. A consideration of these ideas by the jurist influences the legal process at least as much as the study of strategy and tactics influences the conduct of war, and the study of medicine controls medical practice.

The jurist's part in making the law is obscured by the inadequate logical doctrine that regards deduction as a mere chain of tautologies, incapable of producing anything new or significant. If, however, we recognize that logical reasoning means the application of invariant rules to a diversity of changing material, we can see that deduction is a method of exploring the entire field of possibilities. Legal deduction is thus really a projection of principles to govern future cases; and this projection provides the tracks along which legal progress moves. It is therefore impossible to engage in such work intelligently without exercising one's views as to what the policy of the law should be. Hence jurists like Duguit who boast that they are concerned only with the law that *is* are really crypto-idealists. This shows itself naïvely in Duguit's indignation against the unpatriotic theories of the socialists. His own ideal is that of solidarity.

Yet positivism or respect for positive law cannot be eliminated. Its necessity is obvious when we are confronted with the atrocious confusion between law, ethics, and politics in such works as those of Professor Krabbe. Not only does Krabbe fail to discriminate between law and popular feeling of right, but in the courage of his confusion he denies legal force to any law that does not correspond to the will of the majority. History, however, too often testifies to the existence of laws felt to be unjust by vast majorities. In any case law and the feeling of justice are certainly not synonymous. The vast majority is, in fact, largely ignorant of much or most of the prevailing law.

The good citizen obeys not only the laws that he approves but also those that are unjust or absurd; and this is in some measure bound to continue until the advent of the millenial reign of perfect justice among perfect men.

We are thus led to see that justice and the law, the ideal and the actual, are inseparable yet never completely identifiable. The ideal and the real, like existence and value, being and becoming, unity and plurality, rest and motion, are polar categories. Deny one and the other becomes meaningless. Yet the two must always remain opposed. Theoretically, the legal system may be viewed completely from either pole. You may even insist that there is little difference if any between a positivism like Gray's, which admits moral ideas as one of the sources of the law, and an idealism that admits the inherent limitation of any ideal of justice that can be applied to human affairs. The same system of legal rights and duties may be expressible in positivistic or in idealistic language. But not only is language itself a most important factor in human affairs (since all sorts of emotional differences arise from differences of expression), but so long as our knowledge remains incomplete it makes a difference from which end we view the legal system. The positivistic and the idealistic perspective cannot be identical on the level of limited human knowledge.

If we view the law as an effort to regulate life in accordance with ideals of justice and morality, we are bound to admit at least three types of limitations.

I

The first limitation arises from the indetermination inherent in our very ideal of justice. It is a common illusion to suppose that for all questions that can possibly arise our ideal of justice determines specific answers. Our ideals are in fact much hazier than we care to admit.

We all begin by accepting the judgments prevailing in our community. These, like all popular judgments and proverbial wisdom, though they may contain a kernel of enduring truth, seldom express it with a high degree of accuracy or consistency. It is because of this vagueness and inconsistency in popular judgment that science arises as a corrective. The greater simplicity of their subject matter, the more definitely elaborated technique, and a certain amount of ethical neutrality as to their results, enable the natural sciences to depart from popular opinion to a far greater extent than it is possible in the social sciences. This, together with the natural difficulty of seeing any justice in doctrines or sectaries abhorrent to us, makes the elaboration of a consistent ideal of justice one of the utmost difficulty. That this difficulty has not been fully overcome in treatises on ethics, natural law, or legal philosophy becomes obvious when we ask: what precisely is the content of justice and on what evidence are its disputed claims based?

The classical definition of justice makes it consist in rendering everyone his own — *Suum cuique tribuere*. But what is rightly anybody's own is precisely the problem which the law must determine according to some principle of justice. Otherwise the just becomes simply the legal and there is no possibility of unjust law.

If we go to books on ethics we are told that that rightly belongs to one which he has earned, that a just law protects everyone in the enjoyment of the product of his labor. But what, in a cöoperative social state, *is* the product of any one man's labor? In practice this is settled somewhat arbitrarily by appeal to the law which happens to exist. Moreover, even if we could determine on principle what is the product of anyone's labor, it would be very doubtful morality if one could keep it all when others, — the sick, the infant, or the very aged, — were to perish because of this exercise of the right.

That legal justice in some way demands the principle of equality seems certain. But what exactly do we mean by equality before the law? In the end nothing more than fidelity to the classification that the law has already laid down. If all creditors are to share alike in a bankrupt's estate, equality before the law means that the judge must not favor any one party. Obviously, this does not enlighten us as to whether the classification that the law has created is itself just. Should not the law give certain creditors precedence, for example, those who are creditors of a railroad by virtue of having suffered bodily injury? Legal justice is formal. It is important that the law, once created, should be justly, i.e., faithfully, administered. But it is also important that the law should be just in content and as to this purely formal considerations are insufficient.

The Kantian and neo-Kantian efforts to derive conclusions as to specific questions of justice from purely formal principles ignore the logical fact, made clear by modern logic, that from pure universals no particular existential propositions can properly be derived. Pure universals are hypotheses and you cannot prove fact by piling up suppositions. This can be seen in Kant's own efforts to derive the rules of perfect and imperfect obligations from purely formal considerations. These rules follow only if we accept certain empirical ends of life and assume certain conditions of life to remain permanent.

For our present purpose we can see this best in Stammler's legal philosophy. Stammler's ideal of a community of free-willing men appeals to us for various historic reasons, chiefly because of linguistic associations with the word freedom. Critical reflection, however, shows that his ideal itself is essentially vague and indeterminate, if not completely empty. It does not in fact logically support any of the conclusions which Stammler tries to derive from it, since quite different conclusions can be derived from his ideal with equal logical propriety. Let us take a concrete example. Two people mutually agree to live together in free love or being married voluntarily agree to separate and live with other parties. Stammler supports the view of most civilized countries in refusing to sanction a contract of this sort. Yet he does not *prove* that there is anything here contrary to the ideal of a community of free wills. Nor does this ideal enable us to determine whether a contract of employment, due to economic necessity, should be enforced. Something more empirical and specific than abstract free-will is necessary to arrive at a rational account as to what kinds of agreements should and what kinds should not be legally enforced. Again, in time of war we conscript men against their will to be killed or maimed for life. Can the right to do this be derived in strict logic from the ideal of a community of free-willing men? Stammler evades all real problems of this sort by circularly defining the free will as the rational will that is bent on rendering to each what is objectively just. This circular dependence of justice on free will and free will on justice makes the whole enterprise fruitless. Had Stammler used free will in its ordinary sense, as the freedom of the empirical wills of ordinary human beings, Stammler's theory might have been more a condemnation than a derivation of most of our criminal and public law, and especially of the law of taxation. It is noteworthy that despite Stammler's pretensions to establish absolute principles, the only law he condemns is that of slavery. But what is slavery? Do not many labor contracts differ from slavery only in arbitrary legal form, rather than in the substance of things? His rule that "the contents of a given volition must not be arbitrarily made subject to another volition" is devoid of definite meaning, since the word "arbitrarily" is just a blank term filled with question-begging interpretations, so that by means of it you can condemn or justify anything you please.

The radical indeterminism of the neo-Kantian formal ideal of justice can also be seen if we apply it to the conflicting interests of groups, for example, employers and employees. Here the ideal of free-will agreement has certainly broken down and been productive of much injustice. Finally, we need only ask whether the ideal of the community of free will is adequate for international law. Will Panama or Egypt, if independent, have a right to exclude the rest of the world from the use of the Panama or Suez Canals?

The fundamental indeterminism of Stammler's ideal has compelled some of his disciples to speak of the ideal of the place and the epoch instead of the ideal valid for all times and places. Doubtless the ideal prevailing in any given country at any time is much more definite. But that this always coincides with justice it is difficult to admit when we remember that some opposing countries feel and think quite differently. The Austrians felt quite justified in regarding the Trentino as a region to be saved for German culture. Italy is certain that sacred egoism demands that the south Tyrolese be compelled to become Italians. Surely both cannot be right. Is it any different between peoples of different grades of culture? European nations professing Christian love feel themselves thereby justified in sending down air bombs on Mohammedan villages that refuse to be ruled by them; but the Mohammedans are not thereby convinced.

Nor do we get much farther if with the neo-Hegelians we set up the ideal of the epoch of civilization. The term civilization is at best a vague one, and the division of the continuous stream of human history into epochs varies with the purpose of the historian. In any case, we get little help here in deciding the nature of justice. To assert that the ideal of justice varies with time does not help us to know what is and what is not just at any given time, for example, the present. Indeed, no answer is possible at all on an Hegelian or other monistic determinism which allows no real chasm between what is and what ought to be, — a chasm which gives meaning to the human struggle and its tragic, though noble, defeat through the ages. The actual efforts of neo-Hegelians, like Kohler and Berolzheimer, to determine what is right by reference to the ideal of our own epoch are certainly not always and altogether fortunate, — witness Kohler's remark on the retributive theory of punishment, or Berolzheimer's remark, in 1908, on strengthening the German fleet. I am the last man in the world to maintain that the neo-Hegelians are the only ones to talk nonsense when they are certain that they have caught the idea of the epoch of our civilization. Kohler was undoubtedly a man of genius though erratic and uncritically opinionated. But his occasional insights have little connection with the neo-Hegelian philosophy which he professes.

On a subject teeming with human significance rigorous logic is of the utmost importance. Such logic shows us a radical and incurable difficulty in all idealistic philosophies of law: — their ideal is either like the Kantian, purely formal and incapable of solving material issues, or, like the older theories of natural law and the post-Kantian idealism, they uncritically assume certain material principles as self-evident. But the rise of modern neo-Euclidean geometry has undermined the force of the appeal to self-evident premises, and the pretended logical proofs of idealism thus fall to the ground. Critical reflection generally shows these self-evident ethical and jural propositions to be either question-begging, purely verbal plausibilities, or rhetorical justifications for preferences that are too spasmodic to serve as the basis of developed legal systems.

Can we abandon the effort to formulate the ideal that is to govern the facts of the law? Can the ideal of justice be derived from history or the empirical study of the facts themselves? Obviously not if history or empirical study is restricted to the realm of existential facts, since our conclusion cannot contain an *ought* if all our premises are restricted to what *is*. But even if we begin with empirical judgments of what ought to be in concrete cases, we need some comprehensive ideal to organize our conflicting judgments into something like a coherent body. It is doubtless true that our ideal grows more definite as well as voluminous as our experience expands and we get more opportunity to develop as well as to test our ideal by applying it. Still any ideal that is to govern facts of conduct must be more simple, uniform, and constant than these facts themselves.

Dean Pound has used the postulates of civilization as a justification for the laws that secure the interests of personality, possession, and transactions. Certainly without such security our type of civilization is impossible. But these postulates do not undertake to settle questions of justice as to which of two heterogeneous and conflicting interests should prevail. An injunction is asked against striking employees. If the injunction is not granted, irreparable property injury will result. If it is granted, the workingmen will not be able to keep up the organization which protects their standard of living. Which of the two conflicting interests should justly prevail? The law has to balance interests, but it has no scientific scale to measure the weight of the divers interests, nor has it even any means of reducing them to some common denominator.

I conclude, therefore, that no ideal so far suggested is both formally necessary and materially adequate to enable us to decide which of our actually conflicting interests should justly prevail. So long as this is the case, law must be, as it is in large part, a special technique for determining what would otherwise be uncertain and subject to conflict. It is necessary to have a rule of the road, but it is morally indifferent whether it requires us to turn to the right or to the left.

This need for certainty, and the inconvenience involved in changing men's rights, reënforce the human inertia which makes the law always lag behind the best moral insight. As obedience to law rests on habit, a philosopher like Aristotle can plausibly argue that it is better that an unjust law should prevail than that that law should become uncertain by change.

In the absence of an adequately determinate moral ideal many questions must be left to the discretion of judges and administrators. If the judge is both intelligent and well-disposed, his exercise of the discretion is one of the ways whereby justice is found. Yet the need for discretion indicates a limitation of legal justice. To be ruled by a judge is, to the extent that he is not bound by law, tyranny or despotism. It may often be intelligent and benevolent, but it is tyranny just the same. For political reasons it may be well to cultivate respect for judges; but from a philosophic point of view, it is a crude superstition to suppose that anyone can escape the limits of his intelligence and the bias of his limited experience by being elevated to an office. History does not show that the partisan bias of limited group-experience can always be removed by legal training or by the criticism of the legal profession. Professional opinion is itself class opinion. This is not to disparage the judge or the legal profession. On the contrary! He surely is no friend of any profession who encourages its members to think that they are free from human limitations — *Hubris* (ὕβρις) invites the wrath of the gods.

II

This brings us to our second limitation of legal idealism, the inevitable imperfections in the human beings that have to make, to enforce, and to obey the law. We may view the limitations of imperfect human nature (*a*) from the point of view of the legislator, (*b*) from the point of view of those who have to obey the law, and (*c*) from the point of view of those who have to enforce it or operate the legal machinery.

a. The obvious fact which no glorification of law can obscure is that it is made by human beings never completely free from the limitations of human ignorance and inadequate sympathy or good will.

(1) The ignorance of the legislator may relate to the end of the law which he helps to bring about. Moved by the demand for the redress of some grievance, the legislature enacts a statute. But changing the law is like making a change in an intricate plot of a highly organized drama. You cannot change one part without other parts being affected in unexpected ways. Legislatures thus seldom have an adequate idea of what they intend to bring about. The Napoleonic Code intended to guarantee that all the children shall have some part of the patrimony. Did its authors have any idea that they were erecting a check to the growth of population?

(2) Assuming that the legislator knows what effect he wants to produce, he may be ignorant of the natural circumstances involved. All sorts of scientific facts have to be assumed in modern legislation. Our southern legislatures feel competent to pass on the truths of biologic evolution, and one of our western states came near decreeing some absurd value for π. All our state legislatures feel competent to pass on the truths of history to be taught in the public schools. Modern states all contain heterogeneous elements, and laws applicable to a vast majority may be absurd for some groups or regions — e. g., trial by jury in those U.S. possessions inhabited by Negritos. Rural legislators do not know or sympathize with urban industrial life and city legislators do not always understand conditions of farm life.

(3) Of special importance is the imperfect power of the legislature to control the subsequent interpretation of its statutes. The legislature can express its intention only in general terms. It cannot foresee all actual cases. It cannot, therefore, completely control the interpretation and application of its enactments by courts and administrators. The legislature generally looks to the removal of a specific abuse, while courts and jurists must look upon any statute as a part of the whole legal system. Thus the first legislatures that wished to change the common law as to the property rights of married women were repeatedly defeated by courts that persisted in thinking of these statutes in terms of the traditional common law.

b. There are inherent difficulties in forcing obedience to the law. That in a democracy the law is the will of the people is a statement not of a fact but of an aspiration. A great deal of the law is and necessarily must be the work of legislatures, courts, and jurists whose work is seldom fully known to the majority of the people. Indeed, on a rule of conduct on which people are fairly unanimous there is no need for the enactment of any law. Enacted law represents the will of some part of the community, and the rest obey either out of respect or by force of habitual obedience to regular authority. Yet neither legislatures, courts, or jurists, nor all combined, are omnipotent. There is no way of securing perfect obedience where there are strong human motives for disobedience or evasion.

The failure of the law to secure obedience has been historically shown in at least four fields of human life.

(1) In the field of religion. The persistence despite persecution of the Christian churches in the early Roman Empire, of the Jews and Christian dissenters in Russia, England, and elsewhere, shows how persistently minorities may defy and defeat the law.

(2) In the field of personal morals. This has always been a favorite interest of the law, but its failures in this field are proverbial. It is true that the sumptuary laws of the Middle Ages were generally obeyed, but only so long as they conformed to the general moral feeling of mediaeval society. Without a strong moral consensus they cease to be effective. Take, for instance, the case of the New York law which makes adultery a crime. Though thousands of divorces have been granted for that offense there does not seem to have been any conviction for the crime. The law is a dead letter, yet any proposal to repeal it would meet with widespread resentment. The majority of the people of New York State emphatically wish the statute book to express their disapproval of adultery. Why then has there been no enforcement of it? The answer is to be found in the inherent difficulty of enforcement. It is an unpleasant thing to bring into court, unedifying to the public, and it is extremely doubtful whether convictions would greatly reduce the number of actual offenses or result in more good than harm. The failure of our national prohibition law and the many evils which its enforcement involves are too flagrant to need anything but bare mention here.

(3) Similar failure can be seen in the field of economics.

The repeated failures of attempts to regulate wages by law, to prohibit mergers or trusts, to prevent railroads from having an economic interest in the products they carry, all illustrate how difficult it is to prevent evasion of the law by those who have a strong interest in doing so.

(4) In the political sphere we need only mention the failure of the fourteenth and fifteenth amendments to the U.S. Constitution to secure civil and political equality for the negro. Mr. Horwill has recently called attention to the many ways in which Congress and the Executive evade the provisions of the U.S. Constitution. The most interesting of these is what he calls "evasion of discreet

nomenclature," i.e., evading the duty of submitting a law for presidential approval by calling it a concurrent resolution.

There can be no doubt that the framers of the U.S. Constitution intended the Electoral College to serve as a barrier against the influence of political parties in the election of the President. This purpose has been defeated without changing the law, by the extra-legal device of the Political Convention.

c. The limits of legal machinery are a further illustration of human imperfection. Dean Pound has treated this topic with his usual thoroughness in an essay on "The Limits of Effective Legal Action"[1] and I may add only a few remarks. Legal machinery, we must remember, never operates apart from human beings, judges, juries, police officials, etc. The imperfect knowledge or intelligence of these human beings is bound to assert itself. It is, therefore, vain to expect that the legal machinery will work with a perfection that no other human institution does. We cannot expect results too fine for the discrimination of the ordinary juryman. A great deal of injustice cannot be prevented by law because the attempt to do so is bound to produce more evil than it can cure. I think that the action for breach of promise to marry well illustrates this. It is a private remedy detrimental to public decency.

It would be foolish to contend that in the various fields mentioned the law has never been effective. Few injustices are absolutely beyond all human effort, if we are willing to make sufficient sacrifice to remove them. But it is folly to center our attention on some desirable result in itself and ignore the fearful cost of the incidental consequences required to attain it.

We conclude then that in view of the necessary limitations of any legal system and the many insuperable difficulties in the way of enforcing all sorts of moral considerations, it is a wicked stupidity that insists on absolute justice regardless of consequences. *Fiat justitia pereat mundus* is the device of the fanatic, too lazy to think out the consequences of his position. The more humane wisdom is summed up in the saying *summum ius, summa injuria.*

III

The third limitation of legal idealism is due to the fact that legal justice must operate with abstract general rules. To guarantee equality before the law and eliminate favoritism or partiality, the law must operate with rules that are to apply to everyone. No one is allowed to beg in the street whether he be poor or rich, strong or sick, young or old. Anyone under twenty-one years has certain privileges in connection with contracts, no matter how developed intellectually or in the way of business experience. The injustice which this abstract uniformity works in particular cases has generally been recognized and many efforts are made within the legal system to correct it by some form of individualization. This individualization itself, however, becomes subject to rule or else it remains lawless. The demand for abstract uniformity of legal rules is intensified by the fact that a developed legal system must assume a scientific form and that it can do so only as other sciences do, namely, by the discovery of principles in terms of concepts so that multitudes of rules can be deduced from a few such principles. This abstract universality of legal rule is necessary to secure certainty. It ministers to a certain sense of justice which may be viewed as the rationalization of jealousy. But all rigid rules applied to life tend to suppress favorable as well as unfavorable variation. At times it becomes obvious that it is only the better element of a community that suffers from certain laws, while the worse elements evade or successfully defy them. Thus, while the law cannot admit the sovereignty of individual conscience without opening the door to anarchy, it must also recognize that individual conscience may be a much more delicate instrument for moral apprehension, so that to suppress it is to bar the way for more enlightened justice. This inherent difficulty of legal justice, like other difficulties of social life, is not overcome by the Hegelian trick of making *Sittlichkeit* supersede the morality of conscience.

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[1] *Int. Journal of Ethics*, 1916.

An uncritical reliance on the abstract universality of legal justice is the crowning ethical defect of the so-called critical philosophy. It legalizes ethics without moralizing the law. It formulates its imperative in the abstract legalistic manner to the neglect of individual differences. Thus Kant's argument that it is always wrong to tell a lie, even to save an innocent life from a foul murderer, is a striking example of legalistic ethics. In the end it is based on bad logic as well as on moral insensitiveness, as is Kant's horrible view of marriage as a lease.

Universality and individuality, like other fundamental antithetic categories, are the poles of human thought. They can neither be separated nor identified. Positivists fail in trying to separate positive law from all ideals, and Hegelians fail in trying to identify the ideal with some form of the actual, whether the Prussian or other state.

The deeper and more ancient wisdom is to recognize that divine perfection is denied to human beings in legal as in other practical affairs. It is romantic foolishness to expect that man can by his own puny efforts make a heaven of earth. But to wear out our lives in the pursuit of worthy, though imperfectly attainable, ideals, is the essence of human dignity. Reflection on the limits of law thus brings us to religion as the doctrine of how to live in a necessarily imperfect world.

THE RELIGIOUS CHARACTER OF COLONIAL LAW IN THE SIXTEENTH CENTURY SPAIN

Fernando de los Rios
(*Granada*)

BEFORE Professor Chandler of Ohio State University — to whom I am greatly indebted for his courtesy — begins the reading of my modest contribution, I wish to call attention in a few words to the aim of the thesis I am defending. For if it should be correct it would not only make it necessary to change the habitual manner of judging the concrete case which I have selected as an outstanding example to illustrate my point, but it would oblige the theorist of law and politics to search out the element of universal importance which would explain the persistence of the phenomenon.

The question, ladies and gentlemen, is to affirm the intimate, the essential analogy of juridical and political structure which exists between State and Church, which makes it possible historically for us often to see the State close itself internally, leaving no place for discrepant minorities, for dissident consciences. That is to say, yesterday as today, we find instances in which the State is a body of the faithful held together by the compelling bond of a dogma which leaves no openings for the outward manifestations of the heterodox conscience.

In one of his political writings Dostoievski, a spirit not only Russian, but profoundly Byzantine, maintains the theory that the error of the Catholic Church lay in its having transformed itself into State, whereas the problem consists, in his opinion, in making the State Church. This has taken place a thousand times, and this now takes place before our eyes; a superficial analysis will demonstrate this. What is there, then, in the juridical standards, in the political activity of the State, and in its very essence that makes possible this transmutation which we emphasize in our study? The necessary answers which the question demands, as well as the justification of its presentation, make evident, in our opinion, the heuristic value which the working hypothesis we offer may have perhaps for the history of the doctrine of law and institutions.

The paper was then read by A. R. Chandler, Ohio State, as follows:

The State does not always express its will in a way that would enable us to say of its acts that they bear a juridical character. On occasions the will of the State is expressed in a religious form, and its concrete acts have the character of dogmatic formulas in respect to which theoretical dissent is impossible; that is, the State is at times not only a social power which coördinates activities and stimulates empirical aims both individual and collective, but also an entity which organizes itself, internally, like a religious association, on the basis of a strict communion of belief. In a word, the State organizes itself as a Church, and every one of its acts has the rigidity of a *canon*.

The spiritual proximity between juridical and religious rules, between State and Church, explains the facility with which the one has been fused historically with the other. Here we are then before a *fact*, whose theoretic analysis exceeds the possibilities of the moment; but it is possible to make clear, briefly, the fact that this fusion is not merely a matter of past history but also of the present situation. On the contrary, this transmutation of juridical values into religious ones is not only well known in the Egypt of Pharaoh, in the Persia of the Sassanides, and in the aspirations of a Diocletian, but it is equally evident in the Spanish nation of the sixteenth century and in several nations of today, to mention only a few examples. The immanent finality in those historic organizations has differed as it differs in the religions themselves. It would not be difficult, for example, to show that even an atheistic State would possess this church-like character. It is not necessary for juridico-religious institutions to be joined to theism in spite of the fact that they carry implicitly the ardent desire to make of an absolutistic aim, such as earthly happiness, a reality.

When the kings of Castile and Aragon, the two crowns already fused, succeeded in conquering the portion of Spanish soil which remained in the power of the Mussulmen, there began a rapid policy of rendering beliefs homogeneous. The State wished to turn the geographical heterogeneity of the regions and peoples of Spain into a religious unity. To succeed in this it thrust out of its bosom those who, like the Jews and the Moors, formed groups of non-conformists, or it simply stifled the voice of individual dissenters. The wonderful tolerance which for centuries had reigned in Castile and which culminated in the epoch of great splendor in Toledo, from the end of the eleventh to the thirteenth century, disappears entirely. That happens when in the fifteenth century the State becomes theocratized. The equivalence of Church and State was then established, and the functions of the Chief Priest became identified with those of the Prince. The fusing of these two types of values is the outcome of the belief, individual or collective, in a Messianic design.

Internally dominated by the idea of such a design is the Spanish nation when it is surprised by the discovery of America and the advent of the Reformation; and if the latter offered an occasion for strengthening the spiritual unity of the State by means of providing a militant ideal of united national action, an ideal which led Spain to consider herself as a Christian army, the discovery of America provided her with a large area and sufficient personnel on which to exercise the positive mission on behalf of her faith. Europe concentrates its political attention passionately around Protestantism and Catholicism, — around the Reform and the counter-Reform. Let us not seek serenity of judgment and analytical equanimity in that belligerent atmosphere. Let us judge the Spanish colonial activities, not as Catholics or Protestants, but as observers with the objectivity necessary to one who proposes to study a problem of great significance in history.

As we examine the legislation of the Indies and the agreements of the Crown with the conquerors we find the following features. First: America is considered an extension of the Spanish nation; she is Spain herself, and Spain is articulated as one political and legal whole. Secondly, the State considers the spreading of the faith as a task consubstantial with the conquest of America, for the reason that she takes her sovereignty over America not as merely political, but as religious in character. Thirdly, the attitude of the State towards the new vassals, the Indians, is from the beginning one of deep respect for their persons and of an unceasing preoccupation with their religious salvation. To be sure, there were departures from this ideal in its practical application, but it is important to note the zeal with which these departures were punished.

These three features were not sporadic. They were so constant and categorical that they may serve us as an index for the interpretation of this historical period. Coördinating the first two of those features, we have before us the spiritual bases for a state which is striving for the establishment of complete universality in religious faith. "The Church orders us," writes Pedro de Quiroga in 1555 or thereabouts, "to win over faithful brothers; . . . on this consideration our Princes have and possess this land, and to interpret their possession in any other way is blindness of heart" (cf. book entitled *Coloquios de la verdad*, p. 47). In fact, in exchange for the favors extended to the conquerors it was demanded from them that they should avail themselves of priests to convert the natives to Christianity. Still more, "those whose Catholic faith is suspected, and who may be sons or grandsons of those damned by the Inquisition" are forbidden to go to the territories of America (Lope de Gomera, *Historia General de las Indias*, p. 174). The decree of 1526 (Ley II, L. I, Vol. I) orders that when the captains of the King discover or conquer a new province they are to proclaim immediately to its "Indians or inhabitants that they have been sent to teach them good customs, to dissuade them from vices such as the practice of eating human flesh, and to instruct them in the holy faith and preach it to them for their salvation." It is then evident that the unity of faith that characterizes the Peninsular state also characterizes the Spanish Empire. That is why Philip II could say: the kingdoms of Castile and of the Indies belong to the same Crown and therefore the laws and systems of government must be in them as similar as may be possible (*Summary of Statutes of Indies*, Ley XIII, L. II, Vol. II).

The persistence with which "devotion to God" is united to "devotion to the Crown" stands out particularly well in that part of the legislation of the Indies that affects the natives of the land. In virtue of this unity between the religious and the juridical there arises a social policy which determines the sabbatical rest for the Indians, the observance of the command of the Church, prohibition of labors which on account of their hardness "carry with them danger to life, health, or preservation of the said Indians," and such commands as the one that stipulates that the tribute of the Indians should be arranged in accordance "with what they can pay in service or in contributions," and that the tribute shall always be less than what they paid before coming under the jurisdiction of the Crown of Castile (*Testamento de Isabel*, I; ord. de 1542, 1543; Ley V, 1. I, Vol. I; Ley XII, L. XVII, L. I, Vol. I).

In the European struggle between principles of land ownership relative to native populations, we see that in the America of Spain there appears an economy that is indeed *Señorial*, but it is supervised in the name of the theological principle that gave unity to the state. This was the thesis of the conception of a natural law grounded on religious foundations. It is the thesis on which the following writers began to found their juridical work: B. de las Casas, Vitoria, Suarez, Vasquez Menchaca, Molina, Cobarrubias, Soto, and B. de Ayala. That is how these thinkers prepared the bases for international law.

Concluding remarks following discussion of the paper:

I wish to express my thanks to all who have taken part in the discussion, and especially to the illustrious Dean of the Law Faculty of Harvard University, Mr. Roscoe Pound.

As Mr. Pound has pointed out, there is in *equitas* not only the juridical element, but the moral as well; the *equitas* is a point of intersection between the two. But what is the conjunction of Church and State, in its juridical as well as its political connotation? In my opinion, gentlemen, this intersection takes place because both gravitate in their work about the vision of finality. Every organization of State presupposes an idea of the relation which is to exist between it and the individual, or, directly, between it and civilization, for the achieving of aims at times human, terrestrial, again religious, transcendent, or combining both. When, by reason of a teleological stimulus, the State feels itself strongly drawn toward the realization of a concrete vision of finality, it grows suspicious of adverse social organization. This stimulus in the mythical form of the "Golden Age" underlies the great historical revolutions and explains how, through complete faith in the means to achieve the ends, these pass into the firm juridical organization which inevitably gives rise to the "terror," which is the consequence of the struggle of social forces to free themselves from the organization of a dogmatic church which the official State — the Government — tries to give to the corporate State. At other times it is the "eschatological" vision that gives rise to a structure of this sort, and occasions the exercise of the inquisition of conscience as an arm of the State, a phenomenon very much in use today. It is always the idea of finality that lurks in the most hidden corner of the Structure of the State, ready to show itself, and, on favorable occasions, to give rise to a mutation which converts the State into "an association for the purpose of absolute ends with means of indubitable merit for their achieving."

SECTION 4

Time: Friday, September 17
Place: Smith Hall Common Room
Subject: Open Session
Chairmen: Arthur Hill Daniels, Illinois
Mary Mills Patrick, New York

THE PERSPECTIVE VIEW IN ETHICS

Hilda D. Oakeley
(*London*)

THE aim of this paper is threefold, the three aspects being inseparably connected. On the side of method, an attempt is made to indicate a solution of the antinomy of absolute and relative in our experience, and our knowledge of value, especially of the moral value, or practical good. This solution involves a doctrine of reality in which the principle of personal activity as creative of value is central, — i.e., value in the forms in which alone we can experience it is dependent on finite mind. A perspective view of the world of experience as unique for each experient is thus (in the second place) implied. Thirdly, it is argued that our experience of value not only comes through history, but must be historic; it is rooted in memory and history and cannot be abstracted from these forms without vital loss. Value is the law, or otherwise regarded, the spirit of the practical event, rather than the quality of an external object.

The age-long conflict of absolute and relative in the philosophy of value, is perhaps the most remarkable paradox of our philosophic experience, since we have here to do with data of which there is as clear and strong an apprehension in the ordinary consciousness as in that of the philosopher, as perfect in its kind. Yet from the dawn, at least, of moral reflection this schism has appeared, notably in the primary opposition of theory, — the end as pleasure, the law as duty. Today, the immense activity of thought in this field has brought us no nearer to the conciliation of the two standpoints, though subjectivism and individualism, in harmony with the spirit of the times, appear to be on the increase.

In the course of reflection on the results for ethics of the perspective theory of our situation in the universe, determining our knowledge, it seems that in this theory a clue to the solution of this problem may be found. For the ultimate nature of the finite individual involves the recognition of an absolute character in his experience of value, whilst, nevertheless, the special character of that experience must be for him alone, the content, therefore, relative. The method followed is thus metaphysical, but this subject appears to have suffered from a somewhat artificial distinction between metaphysical and psychological methods. For those, at least, who hold that consciousness is fundamental in reality, the divorce between the analysis of the data and laws of consciousness, and the search into the real nature of things, must — except as subordinate method — seem dangerous.

Since then every individual experience is unique, it is not any special form of our experience of value, whether as revelation of eternal beauty, or following of a vision of everlasting righteousness, which has an absolute significance. The judgment of beauty or good may be directed by other minds to other and diverse situations, with equal intuitive clearness and logical certainty. This is not inconsistent with the absolute character of the judgment; but follows from the nature of the principle upon which the presence of value in our world depends, the principle of the person, determining for every individual a unique and incommunicable world which only he can know and act in, since his point of view in reality constructs it, and his every act as person gives it further meaning. A doctrine which harmonizes the fact of the overwhelming reality of the experience of value, and the uniqueness of every form of the experience, may already be found in Plato's treatment of the Idea of Good. He implies the impossibility of logically defining τὸ ἀγαθόν (*Republic* VI) and also the almost insuperable difficulty of communicating it, except in personal contact, from mind to mind, from *life to life*. (*Epistle* VII.) The communication of the Good, though absolute and eternal, is not then communication of a principle which being universal can be envisaged as one and the same by all, but of a power and creative energy which enables each to shape at once and discover his own idea of value. This at least is, I think, the Platonic view in the light of modern thought, though it may be a reinterpretation of Plato's lifelong labor to transform for the individual his seeming (φαινόμενον) good into the true good (τὸ ὂν ἀγαθόν).

This individuality of value explains the tragic conflict of conceptions of good in periods or amongst persons apparently pervaded and possessed by the same type of moral genius and ideal. Personality is the bearer of value, value the life of persons. The ground of its absolute character is that value is essential to the existence of the personal principle. Personal experience must have a minimum of worth (*Wert*) without which the person qua person cannot be at work in the world. A human existence lacking this minimum seems incompatible with sanity. Now the presence of personality means the operation of a special kind of energy, through which new characters arise in experience. In the language of emergence, the emergence of personality gives rise to an order posterior metaphysically to that of pure mind. It is through the universal of value that the distinctively human life comes about.

Otherwise conceived human experience in the activity and apprehension of value transforms the data of existence through reinterpretation. In personal activity as such every object perceived is charged with value. The object, as it enters the world of the person, must take on the colors with which the brush of personality paints it.

The *opposition* of subjective and objective passes away in this interpretation of value. Objectivity retains meaning — important but not identical with that of Greek metaphysical or modern logical doctrines. The value experience depends on the creative energy of the mind. Now the greater this energy, the stronger the impression of objectivity. The significance of this lies firstly, in the necessity of the life of value to the being of personality; it is as necessary as is to the organism the form of the species to which it belongs. If it does not develop this form it dies, or is deformed. Hence the tremendous force of the ought to be. Secondly, it lies in the need to give expression to this absolute character in the experience. This necessity generates the objective.

In the case of beauty, the experience is simple. The beauty does not lie in the colors, sounds, forms, so that it can be plucked out by any mind perceiving it. Yet it seems to be a thing of eternity, since we must project into the object this eternal character in our experience. In the case of the practical good, the experience is more complex. Here the object has no similar basis in sense-elements. Moral value is created, sustained, and realized wholly through spiritual activity. The necessity for the objective is not less. Historically it could be shown how in the dim beginnings of practical life the experience of *elemental value* — exaltation in facing a danger beyond man's endurance, love of parent and offspring — the need begins for a moral object. This is quite distinct from the logical need of the objective. Moral experience is conceivable without the formation of moral objects, concepts. They are nevertheless required, in order to give expression to the absolute nature of the creative personal process. Hence the strength of the affirmation of moral ideas as objects from the beginnings of reflection on moral acts, — whether personified as divine beings and heroes, or conceived as laws, or final ends, or types of action (virtues). Were we sufficiently endowed with the energy creative of value, this objectification would not be necessary. A mind in persons would, to borrow a phrase from Signor Gentile, "pass through the object without stopping." As we are, it stops, and fixes in an eternal world the ideals which stimulate the flagging energy to fresh creativity.

Considerations drawn from the historical character of our experience which might be adduced in support of the relativist doctrine of value, do nevertheless confirm the ultimate harmony of the absolute and relativist views, on the perspective theory. It is because the value experience essentially means the creative life of personality that history is necessary. The perspective nature of our practical experience as determined by history could best be demonstrated by analysis of the beginnings of history as a growth from memory through active experience, and concomitantly of the rise of the world of value directly from its basis in the event. Our experience must be historical since we are persons, i.e., beings whose breath is drawn in a world sustained by their creative effort, an effort for real and not merely animal existence. History as original experience or as lived — the subject-matter of history — is the interpretation of the data of living by practical beings in such a way as to allow the value-experience to emerge.

The universal necessary to this experience is not a logical universal, but an event-universal in which the connection is determined by laws of value unique for the series of data in which any individual is a creative agent.

The form of the experience is the perspective principle in action, the other side of the perspective principle in knowledge. As active, not less than as cognitive, the genius of every individual is *sui generis*. This truth could be illustrated from the simplest experience of man as person, whether primitive in a historical or a cultural sense.

I should choose the simpler experiences by preference, since I am convinced that any philosophy of value must be applicable to these. Value must not be interpreted as though it were "caviare to the general."

For the woodman cutting, the countryman digging, the datum of his doing — earth, roots, tree — the seed of the sower, corn of the reaper, haul of the fisherman, is so far created by him, as it brings with it images drawn from memory, projected into the future, and having some value meaning.

He sees the hearth where the food will be cooked, mother and child refreshed, — the object draws to itself images attended by elemental value, not yet distinguished as beautiful, satisfying love, etc. Memory informs the present, and preserves the spiritual characters in the experience. In memory the dross falls away. It is art of the simplest kind — the more ideal elements endure. We cannot remember the wholly worthless. The transition from memory to history comes about because the law of our form of mind as thought compels us to conceive innumerable other perspectives or similar points of view also determined by memory in the constitution of their worlds. This is the *a priori* basis of history. Now in the sphere of this history transcending the individual line of memoried events, there is an identification of reality and value, not possible for immediate experience. For as the great artist Time transfers ideal elements from the present actuality to the canvas of memory, the two begin to blend. In history rightly understood, the process culminates.

Happily for the survival of the person, or the presence of spirit in our world, history is greater than life. The irrelevant and disorderly details are sloughed off, as the soul of the present passes through death as existent to its resurrection as value, in the remembered world of humanity. But it is out of this that we construct, consciously and unconsciously, the expected future, and are thus able to live on in an environment of value, "looking before and after."

Value means on this interpretation, obviously, not merely or necessarily that which satisfies the need for harmony and pleasure. Harmony, Good, Beauty are our generalizations of qualities that illuminate the experience of persons in their creative treatment of life. (The meaning of this creative treatment, what makes it possible in reality, or in a metaphysical sense, — there is no time to consider here.) History records much if not a preponderating failure of mankind to realize this experience with any continuity. But as the individual memory preserves the efforts of the individual to act creatively, or to realize the good *as it seems to him* (however illusory), so history appears to each one of us as the effort of humanity to create, or to conceive and sustain, a world of values (variously interpreted in each perspective). Though the good be downtrodden, or all be ugliness, we can at least judge that it is so and through our judgment endow history with tragic beauty since personality has emerged, and the bare data of experience must be interpreted by its categories. It is these categories that constitute good and beauty as objective beings. After I had sketched the line of thought I have presented to you, the view that it is in the principle of personality that we must seek for an interpretation of our value experience, I was introduced to Dr. Max Scheler's theory of value in his important work, *Der Formalismus in der Ethik, und die Materiale Wert-Ethik*, and was greatly encouraged by finding in his doctrine of Person and Value, a view which seems to me not very different.

The world for Dr. Scheler is "the factual correlate of the Person. To every individual person there corresponds an individual world. . . . Metaphysical truth or truth in itself must have a different bearing (Gehalt) for every person, since the world-being itself must be different for every person. . . . That the truth above the world and the Absolute truth is in a certain sense a personal, as the Absolute Good is a personal good. . . . lies not in any supposed relativity or subjectivity, or Humanness of the Idea of Truth, but in that essential connection of Person and World."

I must not claim that my view of Person agrees with that of Dr. Scheler in every way. I do not think that it does (though I cannot here consider the difference). But in the doctrine that the correlativity of Value and Person does not do away with the Absoluteness of Value, I find myself at one with him.

Similar is the thought of the late Ernst Troeltsch in his *Historismus*. "The central conception of the doctrine of Value becomes that of Individuality in the sense of a union of factual and ideal. . . . In this sense the concept of individuality is that of fundamental relativity of value. Relativity of value is not, however, Relativismus, anarchy, chance, arbitrariness, but signifies the continually moving interrelation (Ineinander) of the factual and the ought to be, which is ever created anew."

L'ÉDUCATION MORALE DANS LES ÉCOLES FRANÇAISES

PAUL LAPIE †
(*Sorbonne*)

I

LE trait distinctif de l'éducation morale dans les écoles françaises, c'est son indépendance à l'égard des postulats métaphysiques et religieux; c'est ce qu'on appelle son caractère laïque.

Pourquoi ce caractère a-t-il été donné à l'enseignement? Dans l'état où se trouvaient — et où se trouvent encore — en France, les Églises et les partis, il a paru aux législateurs de la Troisième République que la neutralité religieuse et philosophique était le seul moyen de garantir dans notre pays la liberté de conscience et la paix sociale. On a voulu que l'école fût un asile où pussent fraterniser les enfants de toutes les familles françaises, si divisées qu'elles fussent par les dogmes ou les opinions qu'elles professent. La famille garde le droit d'enseigner à l'enfant sa croyance, mais l'école inspire à l'enfant le respect de toutes les croyances.

Ce régime de neutralité dure depuis quarante ans. Non seulement il n'a pas fléchi, mais on peut dire que, depuis sa naissance, l'indépendance de l'enseignement moral à l'égard des postulats métaphysiques et religieux s'est de jour en jour accentuée. Au moment où elle fut proclamée, cet enseignement conservait un lien étroit avec la métaphysique spiritualiste. Ce lien, s'il n'est pas rompu, devient de jour en jour plus ténu. L'enseignement moral, en France, ne peut plus s'appuyer que sur l'expérience psychologique et sociologique interprétée par la raison. L'élément empirique et l'élément rationnel sont en doses variables dans les divers systèmes qui s'offrent aux éducateurs, mais on n'y trouve guère d'autres éléments.

II

Cette élimination des éléments métaphysiques et religieux soulevait devant l'éducateur français de redoutables problèmes: détachée de sa souche traditionnelle, la morale allait-elle conserver son prestige? sur quels principes allait-elle se fonder? comment pourrait-elle s'imposer aux jeunes esprits?

Non seulement la morale n'a pas perdu son prestige, mais jamais elle n'a joué dans nos écoles un rôle aussi important que depuis la réforme qui l'a affranchie du dogme. On aurait pu croire que le rationalisme triomphant aurait relégué au second plan l'éducation des sentiments et de la volonté pour consacrer tous ses soins à l'éducation de l'intelligence. Et les critiques n'ont pas manqué pour soutenir que telle est, en effet, la conséquence fatale (fatale dans les deux sens du mot: nécessaire et désastreuse) de l'avènement de la morale laïque. Mais cette accusation est injuste. Tous ceux qui, depuis quarante ans, ont eu l'honneur de diriger en France l'enseignement public ont répété qu'à leurs yeux l'éducation n'a pas moins de prix, a plus de prix que l'instruction, que la formation du caractère a plus de prix que l'emmagasinement des connaissances et que l'enseignement moral doit occuper à l'école une place privilégiée.

Il est facile de comprendre les raisons philosophiques de leur attitude. Pour peu qu'ils soient psychologues ou sociologues, ils ne peuvent pas, sans être aveugles, ne pas apercevoir l'importance capitale de l'affectivité et de l'activité dans la vie des individus et dans la vie des sociétés. Il n'est pas besoin d'être pragmatiste pour savoir reconnaître le rôle de la volonté. Ce serait aller contre l'expérience que de n'en pas tenir le plus grand compte. Or, nos éducateurs français, depuis quarante ans, se réclament de l'expérience. Ceux mêmes d'entre eux qui, se disant très résolument intellectualistes, paraissent lui accorder le moins de crédit, sont loin d'en faire fi. Leur intellectualisme, qui, à la manière de celui de Herbart, cherche à expliquer l'affectivité et la volonté elles-mêmes par des rapports ou des combinaisons de représentations, ne consiste nullement à en nier la réalité ou l'importance. Pour eux, il n'y a pas de différence essentielle entre l'intelligence et la volonté; l'âme humaine n'est pas brisée en facultés ennemies; la volonté, c'est l'intelligence appliquée à la vie. L'éducateur, qui forme les enfants pour la vie, doit donc se préoccuper de cultiver leur volonté, c'est à dire leur intelligence pratique, autant et plus que leur intelligence spéculative. Avec Descartes, ils répètent qu'en dépit des apparences le jugement détermine la volonté; avec Spinoza, que le vice, comme l'erreur, est une idée inadéquate. Cela ne signifie pas que le vice n'existe pas; cela ne signifie pas que la volonté n'existe pas. Autant vaudrait dire que le physicien nie la chaleur quand il en détermine l'équivalent mécanique. Pour faire l'éducation des sentiments et de la volonté, le rationalisme offre des méthodes qui lui sont propres, mais cela ne veut pas dire qu'il refuse de faire cette éducation. On ne peut donc pas dire qu'il relègue au second plan l'éducation morale.

Il peut, au contraire — et il n'y manque pas —, lui accorder dans son système pédagogique la place d'honneur.

III

Au surplus, personne, sauf quelques fanatiques, ne conteste plus aux éducateurs français leur intention d'accorder à la morale la place qu'elle mérite. Mais, demande-t-on, quelle est cette morale? Que peut être une morale indépendante de la religion et de la métaphysique?

L'école française a prouvé le mouvement en marchant. Ne tirant pas sa morale du ciel, elle l'a tirée de la terre; elle l'a tirée de l'homme même. Sa morale, c'est une morale qui, assez belle pour satisfaire de très nobles esprits, peut bien fournir un aliment substantiel à des esprits d'enfants: c'est cette morale de la conscience et du devoir qui a inspiré à Jean-Jacques Rousseau et à Emmanuel Kant — pour ne citer que les plus illustres — de si admirables méditations. Les instituteurs français recommandent à leurs élèves d'invoquer, avant d'agir, le témoignage de leur conscience et de ne rien faire que leur conscience réprouve. Bien qu'aucune doctrine ne soit officiellement imposée aux instituteurs, cette morale du devoir, où les rénovateurs de l'école française, les Jules Ferry, les Ferdinand Buisson, voyaient une sorte de systématisation et de sublimation des sentiments éthiques les plus profonds et les plus généraux de l'humanité, est celle qui, depuis quarante ans, a été et est encore la plus fréquemment enseignée dans nos écoles.

Toutefois, depuis une vingtaine d'années surtout, on s'est efforcé de préciser cette doctrine et de l'appuyer sur des faits et sur des démonstrations. L'impératif de la conscience se donne, chez Kant, comme un ordre absolu, valable par soi; c'est par sa forme, suivant l'expression kantienne, qu'il commande universellement. On s'est demandé si une matière ne devrait pas être coulée dans cette forme: en devenant plus concrète, la morale n'aurait-elle pas plus de prise sur les volontés? n'aurait-elle pas plus d'efficacité pratique? On s'est demandé également si la conscience morale présente plus de garanties d'infaillibilité que les autres instruments de connaissance: n'a-t-elle pas besoin d'être éclairée, cultivée, dégagée des illusions, des préjugés, des passions qui peuvent l'obscurcir? En particulier, n'est-elle pas, du fait qu'elle est individuelle, viciée par une sorte d'erreur systématique qui l'incline à exagérer l'importance de l'individu et des droits individuels au détriment de la société? L'exaltation de la conscience ne risque-t-elle pas d'aboutir à l'apothéose de l'individu, c'est à dire à l'anarchie morale et sociale? Bref, on a reconnu la nécessité de faire l'éducation de la conscience elle-même.

C'est ici qu'interviennent la psychologie et la sociologie. L'une et l'autre nous montrent que l'individu humain n'est pas un absolu, un αὔταρκες: il n'existe, il ne subsiste, il ne pense et il n'agit que grâce à la collaboration d'autres êtres et notamment d'autres êtres humains. L'interdépendance, la solidarité des hommes est un fait universel, une loi naturelle. De cette loi naturalle à la loi morale la transition est aisée: comment notre devoir ne serait-il pas de maintenir, de favoriser, de développer cette solidarité qui est la condition même de notre existence? C'est ainsi qu'au formalisme kantien se superpose, dans beaucoup de nos écoles, une doctrine solidariste.

Certains cherchent au solidarisme lui-même une justification. Le passage du fait universel de solidarité au devoir moral de solidarité n'est légitime, à leurs yeux, que parce qu'il répond à un besoin rationnel. Si l'homme a le devoir de se sacrifier pour autrui, pour la société à laquelle il appartient, pour les êtres dont il est solidaire, c'est qu'il a contracté une dette à l'égard de ces êtres, à l'égard de cette société, à l'égard d'autrui. En se sacrifiant, il paie sa dette. C'est un devoir de justice qu'il accomplit. La justice, voilà l'idéal moral. Et pourquoi? Parce que la justice, c'est la raison pratique elle-même. Parce que la justice, ce n'est autre chose que, transposée dans l'ordre de l'action, l'exigence d'uniformité et de régularité que la raison théorique, que la science apportent dans l'étude de la nature. La justice veut qu'il y ait entre l'acte humain et ses conséquences une proportion analogue à celle qui existe entre la cause et ses effets. La justice veut que les mêmes actions soient suivies des mêmes sanctions comme la raison veut que les mêmes antécédents soient suivis des mêmes conséquents. La justice est parente des principes constitutifs de notre raison. L'homme ne peut pas penser rationnellement sans les principes d'identité et de causalité; il ne peut pas agir rationnellement sans le principe de justice.

On voit que, pour s'être écartée du royaume surnaturel, la morale enseignée dans les écoles françaises n'en conserve pas moins le culte de l'idéal. D'aucuns ont raillé son hésitation entre des principes divers. Votre enseignement, nous ont-ils dit, manque d'unité et de cohérence: tel de vos maîtres prêche la morale de l'intérêt général, tel autre celle de l'impératif catégorique; les uns ramènent la morale à la science sociologique, les autres opposent radicalement la morale à toute science. Mais si ces divergences subsistent entre théoriciens de la morale (et elles ne sont pas plus surprenantes que celles qui existent entre théoriciens de la science), entre éducateurs elles ont disparu. Morale du devoir, morale de la solidarité, morale de la justice, ce ne sont pas là trois morales différentes, mais, ainsi que je viens d'essayer de le démontrer, trois moments différents d'une même doctrine. Suivant son tempérament ou sa méthode propre, le maître met l'accent sur telle ou telle notion, attire l'attention sur tel ou tel aspect de l'idéal moral. Mais c'est toujours l'idéal. Et, quel que soit l'aspect sous lequel on le considère, il est assez beau pour exercer son attrait sur les volontés.

IV

Cet attrait, comment s'exerce-t-il? Comment l'enseignement moral est-il donné aux enfants? Il est donné en tenant compte des lois les mieux vérifiées de la psychologie de leur âge. On suit, surtout depuis les réformes de 1920 et 1923, une progression qui se modèle sur les moments successifs du développement intellectuel et moral de l'être humain.

A peine né, dès l'âge de deux ans, l'enfant, introduit à la « maternelle, » (nous dirions: au « Kindergarten, » ou à la « Casa dei bambini » si nous n'avions une prédilection pour ce mot tendre « la maternelle » qui exprime si bien notre intention de conserver à l'école des tout petits un caractère familial), l'enfant introduit à la « maternelle » est dès ce moment soumis à une éducation morale. Mais c'est une éducation qui se borne à lui faire contracter de bonnes habitudes de propreté, d'exactitude, de politesse, de sincérité. Pas de leçons, pas de sermons; des actes, qui engendrent de modestes vertus.

Vers six ans, tout en continuant cette éducation pragmatique, on peut, grâce à l'éveil de la curiosité intellectuelle, placer sous les yeux de l'enfant de belles images morales: le récit d'actions bonnes, de vies consacrées au bien. On leur présente l'idéal moral sous ses formes vivantes les plus pures et les plus simples, sans la moindre trace d'abstraction. Tel est le programme de morale au « cours élémentaire » de l'école primaire.

Un peu plus tard, vers la neuvième année, commence une nouvelle période (« cours moyen »): aux habitudes suggérées par le maître viennent s'entremêler des actes individuels ou collectifs dont les enfants, à l'instigation du maître et sous son contrôle, prennent l'initiative. Ils commencent à assumer des responsabilités et les récentes *Instructions ministérielles* prescrivent de multiplier les occasions où les jeunes volontés devront se gouverner elles-mêmes (police de la classe, direction du service de propreté, gestion d'un pécule commun, administration des petites sociétés scolaires: sociétés sportives, sociétés de bienfaisance, coopératives, etc.). Un progrès dans l'enseignement accompagne ce progrès de la conduite. Aux simples récits de l'âge précédent se substituent non pas des méditations ou des dissertations, encore moins des discussions, mais des « élévations » par lesquelles le maître s'efforce chaque jour de transporter ses élèves dans le royaume de l'idéal. Il leur lit des poésies, il frappe leur esprit par de fortes maximes. De plus en plus, il s'adresse à leur réflexion, à leur jugement qui, à cet âge, commencent à s'épanouir. Sans s'élever encore à des abstractions qui ne seraient pas comprises, il dépasse le stade de l'imagination qui était celui de l'âge précédent.

Vers la onzième année, au « cours supérieur » de l'école primaire, on peut coordonner en quelques leçons simples les indications fournies dans les cours précédents, grouper les divers préceptes moraux autour des idées centrales, les rattacher solidement à ces idées comme à des principes, afin que l'enfant, même s'il ne pousse pas plus loin ses études, ne quitte pas l'école sans avoir acquis un ensemble cohérent d'idées morales auxquelles il pourra se référer toute sa vie et qui, toute sa vie, dirigeront sa conduite.

Là s'arrête l'éducation morale pour la majorité des enfants de France, pour tous ceux qui ne fréquentent pas une autre école que l'école primaire.

Mais tel n'est pas le cas pour deux catégories d'enfants qui, au sortir de l'école primaire, entrent les uns dans l'enseignement primaire supérieur, les autres dans l'enseignement secondaire.

Les premiers — élèves des écoles primaires supérieures — reçoivent de douze à quinze ou seize ans, dans toutes leurs classes et pendant une heure par semaine, un enseignement moral bien défini. Mais cet enseignement n'est pas la répétition de celui qui leur a été donné à l'école primaire élémentaire. Il est plus substantiel. Il s'enrichit de notions empruntées au droit usuel, public ou privé. C'est à propos de questions de droit — questions que les élèves de ces écoles, voués de bonne heure à une vie active, auront à résoudre sans délai — que sont posés devant eux des problèmes moraux comme celui du fondement de la propriété, des rapports du capital et du travail ou des principes du gouvernement démocratique. C'est un enseignement bien adapté aux besoins de ces jeunes gens qui se destinent aux carrières agricoles, industrielles et commerciales ainsi qu'à certaines fonctions administratives.

Plus substantiel encore, plus rationnel et en même temps plus pragmatique est l'enseignement moral donné dans les écoles normales aux jeunes gens de seize à vingt ans qui se destinent à la carrière d'instituteurs. — Plus pragmatique, car il est tous les jours soumis à l'épreuve de la pratique: le régime intérieur des écoles normales est un régime libéral, un régime de self government; les élèves, qui seront demain des maîtres, font l'apprentissage de la liberté; ils sont responsables de leurs actes: l'efficacité de la morale qui leur est enseignée est vérifiée par la valeur des actions qu'ils accomplissent. — Plus substantiel, car il s'appuie sur un enseignement systématique de la psychologie et de la sociologie. La psychologie est depuis longtemps enseignée dans les écoles normales de France; depuis 1920, la sociologie est introduite dans leur programme. Innovation qui fut âprement discutée mais qui paraît maintenant acquise. Elle a pour but de montrer aux futurs maîtres de la jeunesse que les faits moraux obéissent à des lois, que les variations des coutumes humaines ne sont pas arbitraires, que la morale et la science ne sont pas des sœurs ennemies ni même des étrangères et que le scepticisme moral est une vue superficielle de la réalité. Il est trop tôt pour apprécier les résultats que donnera cette introduction de la sociologie dans nos écoles normales; mais il est du moins un résultat que l'on peut constater: c'est qu'en renouvelant l'étude des questions morales elle a suscité pour elles, parmi nos futurs instituteurs, un véritable enthousiasme.

Plus rationnel enfin, disions-nous de cet enseignement en le comparant au programme des autres écoles. C'est que, après avoir recueilli les renseignements que le psychologue et le sociologue peuvent offrir au moraliste, nos futurs maîtres sont appelés, dans la dernière année de leur séjour à l'École Normale, à interpréter ces données, à les discuter, à remonter aux principes de la morale. À l'âge où sont parvenus ces jeunes gens, cette réflexion sur les principes est possible. Et pour nos normaliens qui seront demain des conducteurs d'hommes elle est nécessaire.

Voyons maintenant quelle éducation morale est donnée à notre seconde élite, c'est à dire aux jeunes gens qui, vers la douzième année, sont entrés dans les établissements d'enseignement secondaire (lycées ou collèges). A première vue, ils sont moins bien traités que leurs camarades des écoles primaires supérieures: pendant plusieurs années, ils n'entendent aucune leçon de morale. Dans l'enseignement secondaire français, la morale, suivant une expression consacrée, demeure à l'état diffus. La culture morale résulte, dans ces établissements, des réflexions faites par les maîtres au cours des lectures et des exercices ou à propos des incidents de la vie quotidienne; elle résulte de la discipline et de l'atmosphère de la maison.

Tous les éducateurs français n'admettent pas que cette méthode diffuse soit une méthode suffisante. Mais la tradition est vivace. D'autre part, les programmes sont lourds. Il serait bien difficile de les charger d'un nouvel article en introduisant dans toutes les classes de l'enseignement secondaire une série continue de leçons de morale. En revanche, la morale reprend ses droits lorsqu'approche la fin des études secondaires: dans la dernière année, une partie importante du cours de philosophie lui est réservée. Et, si la sociologie ne s'y introduit qu'avec timidité, la discussion des principes de l'Éthique, appuyée en général sur une histoire succincte des doctrines, y prend une place très notable.

V

Qu'il s'agisse des écoles primaires ou des écoles secondaires, l'enseignement moral donné dans les écoles de France est, quoi qu'en pensent nos adversaires, bien loin d'avoir fait faillite.

Lorsque, à différentes reprises depuis la rénovation de l'école laïque, la criminalité juvénile a semblé faire des progrès dans notre pays, il a été facile de s'écrier: « C'est la faute de l'école laïque! ». Mais il a été plus difficile de le prouver. Toute enquête minutieuse et méthodique prouve le contraire. Toute enquête minutieuse et méthodique prouve que les jeunes criminels appartiennent en majorité à des familles désemparées par des crises économiques, désagrégées par le divorce ou par la mort, dans lesquelles les enfants, livrés à eux-mêmes, désertent l'école et échappent par suite à son influence: on ne saurait la rendre responsable de leurs crimes.

Par ailleurs, la guerre de 1914–1918 n'a-t-elle pas démontré que les élèves de nos écoles, qui composaient les trois quarts de nos armées, savaient tout comme d'autres pousser jusqu'au sacrifice de leur vie leur sentiment du devoir? Quelle meilleure preuve apporter de l'efficacité de notre système d'éducation!

L'expérience commencée en 1882 est donc décisive. Que le système français d'éducation morale ait atteint la perfection, il faudrait pour le soutenir n'être pas éducateur, car tout éducateur est sans cesse à la recherche du mieux. Aussi cherchons-nous sans relâche à améliorer notre doctrine et notre méthode morales. Du moins quarante années d'expérience nous assurent-elles que cette doctrine et cette méthode reposent sur de solides principes.

LA PEDAGOGIA, LA SCUOLA E L'EDUCAZIONE NELLA NUOVA ITALIA

Giacomo Tauro
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LA Pedagogia, come teoria generale della pratica educativa nella varietà delle sue attuazioni, dalla famiglia alla Scuola, e la Filosofia dell'Educazione, come aspetto universale del concetto educativo nei suoi addentellati con la filosofia generale, in cui, in ultim'analisi, si risolve, pur essendo speculativamente distinte, si ritrovano nel processo storico così intimamente collegate che con grande facilità si trapassa dall'una nell'altra senza avvertimento dei loro caratteri differenziali.

Nell'Italia nuova, rifatta dai plebisciti ed ordinata in Stato Unitario, la fusione della Filosofia dell'Educazione e della teoria della pratica educativa si compie ad ogni piè sospinto, ma non sì che risalendo alle origini, non si possa indagarne il corso rispettivo, ove si consideri che da una parte l'Italia nuova è l'attuazione di un ideale da secoli perseguito per costruire, sulle eredità rinascenti dell'antica Roma, un forte stato moderno, capace di gareggiare con gli altri già costituitisi in Europa dall'inizio dell'evo moderno; e dall'altra che questo forte stato moderno, sorto come per incanto e sotto così maestosi ricordi, ha sentito il bisogno non pur di raggiungere, con lavoro intensivo, in serie di istituzioni create e diffuse per tutto il suo territorio, lo sviluppo conseguito dagli altri Stati Europei, ma di rinsaldare anche nel suo seno e di rendere nella realtà attuosa l'idea di un'Italia grande e potente, perchè attiva, laboriosa e feconda.

Si trattava insomma di costruire un popolo secondo le esigenze e gli ideali dei tempi moderni in un grande stato, nel quale i cittadini sentissero questa nuova e prepotente esigenza della loro vita. Si trattava non pur a ristretti organismi statali, esaurentisi nel loro conservatorismo, di sostituire uno stato grande e forte e anelante verso il progresso, ma di sostituire anche al vecchio particolarismo e al gretto municipalismo, degenerante in quietistico individualismo, una nuova vibrante coscienza nazionale che fosse nel tempo stesso consapevolezza ed attività, pensiero e azione, conoscenza e pratica.

La Filosofia dell'Educazione, come sintesi ed orientazione di questa generale esigenza storica del popolo italiano, ha percorso le fasi inerenti a tale incessante movimento dello spirito italiano, che, ricercandosi, nella molteplicità degli spiriti individuali ritrovava se stesso come collettività pensante ed operante come unità, risalendo non pur ai ricordi di Roma antica, ma anche a quelli delle nostre gloriose Repubbliche medioevali che per tanta parte fecondarono e diressero la vita commerciale dei tempi di mezzo.

La fase che precedette la statificazione del popolo italiano fu contrassegnata da uno *spiritualismo religioso*, come che preparante gli animi alla redenzione della Patria, sia nella concezione teocratica di Vincenzo Gioberti e nella visione umanitaria di Giuseppe Mazzini — i due apostoli del nostro Risorgimento Nazionale — sia nell'opera e negli scritti di Antonio Rosmini, di Raffaello Lambruschini, di Gino Capponi, di Ferrante Aporti, di G. A. Rayneri.

Movimento secolare d'idee destinato a produrre una profonda trasformazione nelle coscienze e a preparare, almeno nel pensiero delle classi colte, l'idea del nuovo Stato Italiano. Chè se la rivoluzione politica, che condusse all'unificazione della Patria, fu opera di una minoranza di veggenti, la grande massa del popolo vi aderì più con l'intuito che con spirito di consapevolezza. Quindi il problema che s'impose al legislatore dopo la costituzione dello Stato Italiano fu appunto quello dell'istruzione e dell'educazione, soprattutto popolare.

Portanto la Filosofia dell'Educazione, pervasa, nella sua *prima* fase di spiritualismo ortodosso, da un senso di mistica religiosità, in una *seconda* fase, che s'inizia con la creazione dello Stato Italiano per esaurirsi nel periodo della conflagrazione mondiale, non potè non risentire l'influsso di questi varî problemi di ordine pratico, che s'imponevano, per conformare il popolo italiano ai nuovi doveri derivanti dalla coscienza dei nuovi diritti, assunti dall'Italia nel concerto delle nazioni.

Chi con senso storico e con occhio sociologico guardi alle idee che presiedettero allo svolgimento dell'educazione in Italia nel periodo che va dal 1861 al 1915 non può non rimaner sorpreso dagli sforzi compiuti, attraverso difficoltà di ogni genere, in un'atmosfera di tollerante liberalismo, per riempire il Paese di una fitta rete d'istituzioni scolastiche di ogni ordine e grado e per imprimere nuovo ritmo alle istituzioni di un popolo fecondo e attivo, giovane e pur antico, costretto ad aumentarsi e moltiplicarsi sur un suolo dotato da natura di tutti i pregi, ma incapace di contenere una popolazione in continuo progresso.

La storia pedagogica d'Italia dal 1861 al 1915 è la storia del suo travaglio interiore per ritrovare, nell'avviamento delle nuove generazioni, la sua via con l'intensa volontà di vivere e di espandersi, in esso insita; è la storia di un pensiero che non vuol segregarsi nella ruminazione del passato e nella esaltazione egoistica di se stesso, ma tende a ricongiungersi al pensiero delle altre nazioni per vivere nelle nuove generazioni una vita spirituale internazionale.

Da questo duro ed impellente bisogno la Filosofia dell'Educazione trae, nel suaccennato periodo, la sua generale ispirazione. Ma il suo Positivismo — prevalente in questo periodo — non è unilineo e conseguenziario, perchè non derivante logicamente da una primordiale immanente fonte metafisica, ma è un Positivismo critico ed eclettico, che si avvantaggia delle tendenze più svariate della Filosofia contemporanea ed in modo precipuo tende a modificare il metodo di pensare, e, corrispondentemente, il metodo di condotta e di vita, sostituendo alle antiche abitudini di quietismo e di indifferenza, di pigrizia e di inerzia mentale, abiti nuovi d'indagine, di osservazione, di penetrazione nella realtà viva e pulsante della vita per conoscerla, dominarla e tesoreggiarla. Questo pensiero si organizza, si sistema, si esplica, si fissa in forme diverse e in varie guise, secondo la mentalità dei pensatori e la potenza espressiva degli scrittori.

In una relazione come questa di carattere sintetico, i particolari non contano. Ciò che ha valore è la veduta d'insieme, determinata dalla visione complessiva, sotto la quale si presenta in questo tempo in Italia la Filosofia dell'Educazione; sia che s'innesti, come fenomeno particolare, nel quadro complesso di un sistema compiuto ed organico di Filosofia, come in Roberto Ardigò, maestro del Positivismo Italiano; sia che si appalesi come sintesi di un binomio — la Filosofia e la Scuola — come nel testamento pedagogico di Andrea Angiulli, antesignano del movimento pedagogico — positivistico in Italia; sia che si prefigga di rendere attuoso il principio della Educazione Nazionale Italiana, principio di vita, di attività e di lavoro metodico e proficuo, come nelle iridescenti faville pedagogiche di Aristide Gabelli e di Pasquale Villari; sia che fra l'Educazione intellettuale e quella fisica tenti un connubio, come nei valorosi propugnatori della ginnastica scolastica educativa in Italia (Baumann e Valletti); sia che si proponga, su orme herbartiane, di tracciare adequati metodi di educazione intellettuale; sia finalmente che s'insinui sino nello studio dell'età infantile, per proseguire e svolgere, pur negandolo, il principio pedagogico e sociale insito nell'opera benefica di Ferrante Aporti, il fondatore degli Asili infantili italiani.

Sono conquiste della teoria pedagogica in questo tempo, oltre il principio fondamentale dell'Educazione di Stato, come principio basilare informatore di tutta la vita dell'educazione, l'ordinamento della scuola elementare e popolare, lo sviluppo delle istituzioni scolastiche a basi realistiche e di quelle per la preparazione degli insegnanti primari, la parte sempre maggiore data all'educazione fisica e agli *sports* nella vita della giovinezza, la fissitura di istituzioni private per l'estensione della coltura superiore, come le Università Popolari, le provvidenti escogitate per rendere sempre più efficace l'obbligo dell'istruzione con i Patronati Scolastici ed i Ricreatori. Ma la conquista principale rimane sempre quella di aver destata la coscienza della grande massa del popolo italiano, di aver operato un movimento in quegli strati inferiori che per secoli, in una deplorevole condizione d'inferiorità, erano stati tagliati fuori dalle vie della civiltà e dell'umanità. Questo movimento, di sua natura centrifugo e circolare, che ha avuto atteggiamenti e fasi diverse si è venuto, poco per volta, ordinando ed orientando verso una nuova più progredita coscienza del popolo italiano, in una nuova fase di filosofia dell'educazione, la quale soltanto oggi può presentarsi come una visione prospettica delle esigenze immanenti dello spirito della nostra nazione in questa nuova era della civiltà mondiale.

Alla perfetta identificazione dello spirito individuale con quello nazionale occorreva la realtà di uno stato, in cui il principio di disciplina s'imponesse come un principio basilare di organamento, di arginamento e di sviluppo della vita del Paese.

Era necessario che i valori spirituali, balenati sull'orizzonte, attraverso la tragedia della guerra, nella considerazione della fugacità della vita individuale e in cospetto dell'Eterno, che si prospetta come legge immanente di giustizia, si immergessero, nella vita pulsante del Paese, facendone risaltare quell'intimo senso di religiosità che concilia, sopprime e supera tutti gli antitetici egoismi individuali nella visione universale d'una vita dello spirito trascendente gl'individui e perennantesi.

La Filosofia dell'Educazione, che, attraverso il travaglio di quest'ultimo decennio, si viene laboriosamente costituendo in Italia, mira, nel tempo stesso, ad essere una Pedagogia Nazionale ed Umana, collettiva ed individuale, dominata da un vivo senso di storicità.

Come tale essa riconosce nello Stato Nazione, come realtà storica immanente, e nello spirito individuale, che in sè riflette la vita dello stato e vi s'identifica, la sua principale ispirazione. Ma la forma in cui si concretano le idee peculiari della Filosofia dell'Educazione, consona al momento storico che attraversiamo, attinge sua forza dal principio *attivistico* e *voluntaristico*, che domina non pur l'educazione, ma la vita odierna, perchè non si tratta tanto di prender possesso di una realtà preesistente e di conformarvisi, quanto di contribuire a costituire una nuova realtà. La fattività, che pur rientrava fra gli elementi della tradizionale educazione, diventa principio fondamentale dell'educazione, anche presso quei popoli, che per una vieta e millenaria tradizione, erano portati a considerare il lavoro come una dura necessità se non come un vero e proprio castigo, piuttosto che come una legge immanente all'uomo per sviluppare ed affermare se stesso come uomo, cioè come spirito. Quando si convien nell'aforisma che lo spirito non è che lavoro e che in tanto lo spirito è e si afferma in quanto lavora, allora si può anche dire che la Filosofia dell'Educazione e entrata veramente in una fase attivistica e voluntaristica, e che il popolo che la esprime, come un'esigenza del suo spirito, lavora a costruire il suo avvenire ed è degno di vivere e di perseverare nella sua esistenza.

La nazione italiana attraversa pertanto uno dei periodi di maggiore sua efficienza spirituale, animata tutta com' è da una prepotente volontà di vita, che è forza di espansione, di progresso, di produzione, di dominio sulle cose e su di sè.

Ed anche la Filosofia dell'Educazione, nella molteplicità dei suoi odierni indirizzi, rivela il fermo proposito del pensiero italiano di fare dell'educazione delle nuove generazioni del nostro popolo una leva per lo sviluppo e la sempre maggiore affermazione dell'Italia, come stato e come nazione, come collettività organizzata e come ricchezza d'individui, nel mondo. Perchè è questo uno dei caratteri della Filosofia dell'Educazione nei Paesi che, come l'Italia, non possono rassegnarsi a camminare su un binario uniforme, ma dove il pensiero, su fogge diverse, si atteggia e si esplica, ed in mille voci esprime una voce sola, e per diverse vie esplica un solo fondamentale pensiero, che è vita e fremito dell'Italia in marcia. Le differenze possono essere e sono nei particolari e stanno ad indicare i modi diversi d'intendere e di rappresentarsi il problema educativo. Ma, nel suo complesso, la nostra Filosofia dell'Educazione, pur nelle determinazioni varie di *Realismo* e nelle gradazioni diverse di *Idealismo* — in cui si inculca il pensiero degli odierni scrittori di questa disciplina in Italia è essenzialmente una nelle sue direttive generali, chè l'uno e i singoli, trascendenza ed immanenza, speculazione ed esperienza, ideale e reale, forma e materia, si unificano nella visione di una concezione idealistica dell'Educazione, come mezzo e processo per l'affermazione sempre maggiore dell'umanità nell'essere umano, della nazionalità nell'individuo.

Sono espressioni di queste molteplici tendenze i vari indirizzi, che non stanno però a rappresentare campi chiusi, ma punti di riferimento ai quali si collegano i diversi pensatori e scrittori italiani contemporanei di Filosofia dell'Educazione, che, secondo la generale ispirazione dei loro studi, possono inserirsi o nel Neo-Kantismo, o nell'Herbartismo o nelle varie forme di Idealismo e di Realismo.

1. Fra i Neo-Kantiani, che tengono una posizione intermedia fra gli Idealisti e i Realisti, emerge Giovanni Vidari, che, nei numerosi suoi scritti, e soprattutto nei suoi *Elementi di Pedagogia*, ha costruito una dottrina dell'Educazione, che, mentre parte da dati positivi — psicologici, storici e sociologici — si eleva alla determinazione di principi ideali impliciti nell'esperienza spontanea e resi sempre più generali e stabili dall'esperienza riflessa a pensiero filosofico. A lui si riconnettono, per vie diverse, il Maresca, che dall'Herbartismo e dall'Idealismo Assoluto si è venuto sempre più svolgendo verso il Neo-Criticismo, ed il Baratono, che, superando l'originario suo Positivismo, si è sempre più accostato alla teoria Neo-Kantiana. Nel resto la posizione Neo-Kantiana in pedagogia costituisce un punto di transizione o il risultato di compromessi fra dottrine opposte, ed il Neo-Criticismo, quando non affoga nello scetticismo, come a ricovero finale del processo critico, rappresenta sempre una posizione intermedia che, in ultima analisi, si conchiude in un eclettismo misurato e circospetto.

2. Gli Herbartiani, se non sono giunti a trapiantare in Italia, nella sua interezza, una dottrina pedagogica che presso altri popoli ha esercitato notevole efficacia, sono riusciti però a tener desta l'attenzione su problemi didattici concreti, abituando gli studiosi a discuterli con coscienziosità scientifica e filosofica. Preceduto già dal Bonatelli, dal Labriola e dal Fornelli, si è reso, in quest'ultimo quarto di secolo benemerito dell'Herbartismo pedagogico in Italia Luigi Credaro con l'insegnamento, e con l'opera sua di Uomo di Governo. Ma di questa, come di altre correnti pedagogiche, prodottesi in Italia in questi ultimi anni è avvenuto che, nel bisogno di difesa contro gli assalti di una nuova dottrina che tende a riassorbire la pedagogia nella filosofia senza residuo, si è venuto costituendo un Realismo Pedagogico o Ideal-Realismo, nel quale confluiscono tutte quelle tendenze che non pur mirano a difendere l'autonomia della scienza dell'educazione, ma anche la considerazione obiettiva del fatto educativo come dato ineliminabile donde prende le mosse la riflessione pedagogica. Pertanto a queste dottrine, insieme congiunte per la difesa della pedagogia come disciplina a sè, può ancora applicarsi un titolo comprensivo, che non sta più a rappresentare una specifica e ben determinata corrente di pensiero.

3. Questo titolo è *Positivismo*, sotto la cui denominazione possono raggrupparsi studiosi di preparazioni di mentalità di applicazioni diversissime, congiunti dalla preoccupazione fondamentale dello studio dell'educazione come fatto, prima che come idea e come concetto. Appartengono a questa categoria, non pure filosofi che, derivando il loro pensiero da quello dell'Ardigò, ne hanno sviluppato, con libertà di spirito, parti relative ai problemi pedagogici, come Giovanni Marchesini, Giuseppe Taroshi, Erminio Troils, che, per vie diverse, hanno contribuito allo sviluppo della dottrina positiva della pedagogia, orientandola, con opere pregevoli, verso forme nuove di Idealismo pratico; ma anche scienziati che sotto l'influenza o di Giuseppe Sergi o di Cesare Lombroso, con ricerche di psicologia sperimentale e di psico-patologia, hanno contribuito all'incremento degli studi sperimentali sull'infanzia normale e anormale ed accanto alla pedagogia normale hanno fatto sentire il bisogno d'una pedagogia correttiva o riparatrice, come Sante de Sanctis, Cesare Colucci, Zaccaria Treves, Giuseppe Ferruccio Montesano, ecc. L'amore dell'esperimento e le ricerche particolari di Gabinetto e di Laboratorio fecero talora dimenticare la visione unitaria e filosofica del problema educativo, che però riapparve su dottrina fondamentalmente positiva prima negli scritti di Pietro Siciliani e poi nell'opera, sotto tanti aspetti, pregevole ed ispirata ad un'ampia visione sociologica, di *Saverio de Dominicis*, destinata a rappresentare, nella mente del suo autore, un organamento sistematico della scienza dell'educazione, secondo il Positivismo; e nei meditati ed acuti scritti di G. A. Colozza, che, nell'ambito stesso del Positivismo, tentò critiche profonde, intese ad una superazione del Positivismo stesso, promanante dal suo seno, e richiamò l'attenzione degli studiosi su problemi come quelli della *Meditazione*, dell'*Immaginazione*, dell'*Inibizione*, dello *Sforzo* e del *Giuoco*, che ripresentano in forma nuova e sotto peregrino aspetto parti trascurate della pedagogia.

Ma l'indirizzo positivo della pedagogia in Italia, oltreche per l'opera di psicologi sperimentalisti, di naturalisti, di medici e di frenologi, di sociologi e di filosofi, si è avvantaggiato del lavoro coscienzioso ed accurato di uomini di scuola che nello studio di singoli problemi educativi apportarono i risultati della loro esperienza, corroborato da una metodica riflessione e da viva fede nel miglioramento dei nostri sistemi scolastici ed educativi in armonia al genio della nostra rivoluzione politica. Gli scritti di tali uomini — fra i quali ricorderemo, oltre il Gabelli già citato, Gerolamo Nisis, Luigi Gamberale, Giuseppe Fraccaroli, Giovanni

Daneo, Francesco Veniali — costituiscono il prodotto più notevole in cui si esplicò effettivamente la dottrina positiva dell'educazione in Italia, contribuendo al perfezionamento dei nostri ordinamenti scolastici.

4. Si riconnettono al Positivismo, superandolo, Guido della Valle, che dagli studi di psicologia sperimentale prese le mosse per costruire, con ampio corredo di studi economici, una dottrina energistica dell'educazione, intesa, attraverso l'impostazione di leggi del lavoro mentale, come Dottrina dei Valori, o Axiologia; e nel campo pratico, Maria Montessori, che, dall'esame dei deficienti, secondo le direttive dell'Itard e del Segnin, trasse le prime ispirazioni per la creazione di un nuovo metodo di educazione infantile, che ha avuto grande fortuna anche nelle altre nazioni.

5. I Neo-Tomisti, rinfrescando e adattando alle odierne esigenze le dottrine di Tommaso d'Agnino, richiamate già nella pedagogia italiana del Risorgimento da Raffaello Lambruschini nei suoi Dialoghi sull'Istruzione, tentano di conciliare i diritti dello spirito con la peculiarità della materia, in una dottrina dualistica che si rappresenta come realismo oggettivo e, concependo l'uomo come un composto, pur nella visione cattolica dell'anima non trascurano i risultati della psicologia sperimentale ed il contributo delle scienze naturali per l'educazione dell'uomo. Esponenti di questa corrente, di cui si può considerare, sotto un certo rispetto Ausonio Franchi nelle sue *Lezioni di Pedagogia* gli iniziatori di tutto quel movimento che ha portato all'istituzione dell'Università Cattolica del Sacro Cuore, di Milano, e cioè col Padre Gemelli, l'Olgiati, il Chiocchetti e il Eredici ai quali si possono aggiungere lo Stefanini, il Ferrari ed altri, che, sotto altri aspetti derivano dallo spiritualismo cristiano di Giuseppe Alliovo e di Augusto Conti.

6. Rappresentano invece uno stadio intermedio fra il Neo-Tomismo ed il Positivismo gli assertori del Realismo-Psicologistico, che si collegano al nome e all'insegnamento di Francesco de Sarlo, alla cui indefessa operosità la filosofia italiana deve non solo un'ampia di fioritura di studi e di referenze su pensatori stranieri contemporanei, ma anche e soprattutto l'impulso verso manifestazioni di pensiero che hanno raccolto ricca messe di contributi anche nel campo della filosofia dell'educazione: per merito di Giovanni Calo, spirito acuto e vivacissimo, che nello studio dei problemi educativi ha portato, oltre ad un'ampia e sempre fresca informazione, una visione limpida ed equilibrata che non perde mai il rapporto con la realtà circostante; Antonio Aliotta, che, pur dedicando l'agile ingegno ai problemi di filosofia generale, non ha

trascurato di portare il suo sguardo indagatore con vivo senso d'idealità sul dinamismo educativo, Eustachio Paolo Lamanna, Delio Arrighi, Raffaele Resta, Emilia Santamaria Formíggini, ecc.; questi ultimi piuttosto come indiretta derivazione, chè nei loro scritti, se varie sono le affinità è seguita una personale linea di sviluppo.

7. Accanto, e si potrebbe dire anche contro alle predette correnti, si è venuta in quest'ultimo ventennio affermando una balda scuola, la quale, pur derivata da una dottrina filosofica ritenuta non suscettiva di produrre dal suo seno una pedagogia, ha invece prodotto molte opere, le quali, mentre son tutte congiunte dal proposito di negare alla pedagogia ogni valore, si svolgono e si diffondono come vere e proprie opere pedagogiche. Nell'interiore contrasto che domina la nuova dottrina, la quale, mentre in teoria nega la pedagogia è costretta poi ad affermarla nel fatto, sta il dramma vero e l'alto *pathos* di questa corrente, la quale ha avuto l'incontrastabile merito di sconvolgere tutto il campo pedagogico, di approfondirne le antinomie, per superarle e risolverle, di penetrare sin nell'intimo del processo educativo, per affermarne la spiritualità, in una concezione rigida dell'educazione, considerata soltanto come autoeducazione, nella infinita libertà dello spirito, concepito come unità di spirito educativo, e finalmente di promuovere prima una radicale riforma dell'educazione e di attuarla poi nella trasformazione delle istituzioni dello stato compiutesi in questi ultimi anni, con fermezza e costanza di propositi e con impeto rivoluzionario. Il Neo-Hegelismo Italiano, affermatosi nell'Idealismo Storico di Benedetto Croce ed in quello Attualistico di Giovanni Gentile, pur confermando la tesi dell'Hegel, contraria a qualsiasi positiva concezione pedagogica, approfondisce nel campo educativo l'acuto sguardo e, considerando l'educazione come processo del tutto autonomo e rilevandone il carattere essenziale di pura e profonda autoctisi, ha determinato, per opera soprattutto del Gentile e della sua scuola, una profonda trasformazione nel concetto di educazione, ed ha apportato in tutto l'ordinamento scolastico e nei metodi didattici un'ampia e repentina rivoluzione, abbattendo inveterate tradizioni e scuotendo posizioni formidabili.

Di contro alla dottrina che considerava le istituzioni scolastiche come opere venutesi lentamente costituendo nei secoli e come effetti di compromessi e di transazioni fra la teoria e la pratica; contro la dottrina, che, forte della tradizione, riteneva gli ordinamenti scolastici costruzioni così delicate da non poter essere modificate se non molto lentamente e con lievi ed impercettibili innovazioni, la riforma scolastica del Ministro Gentile, partendo dal presupposto che la realtà è una creazione dell'umana volontà e che a rattoppi e ad accomodamenti sia de preferirsi, quando ciò è possibile, una ricostruzione *ab imis fundamentis*, con mano ferma e con visione organica ha attuato una trasformazione radicale dell'ordinamento scolastico in Italia, in tutti gli ordini e gradi d'insegnamento ed in tutte le branche dell'amministrazione scolastica statale.

Il tempo e l'esperienza daranno la misura di questa grande riforma, affrontata nel campo scolastico italiano da Giovanni Gentile. A coloro che, giorno per giorno attuandola, la esperimentano, non si compete che riconoscere l'energia richiesta da parte del suo ideatore nel sostituire ad un sistema scolastico, opera del tempo, un nuovo sistema di principi e d'idee che fondono insieme Filosofia e Religione, Spiritualismo ed Umanismo, Classicismo e Modernità e tendono a fare della scuola, richiamata allo spirito religioso del popolo italiano, un laboratorio per la formazione delle nuove generazioni e per la selezione delle classi dirigenti, secondo lo spirito del classicismo, rinnovato ed adattato alle esigenze dei tempi moderni. Come filosofo dell'educazione e come attuatore nel campo legislativo scolastico delle sue idee il Gentile ha intorno a sè formata una scuola numerosa e fiorente, che diffonde e svolge i principi del Maestro. Appartengono ad essa, fra gli altri, Giuseppe Lombardo, Radice, Ernesto Codignola, Giuseppe Saitta, Armando Carlini, Guido Santini, ecc.

8. Ma chi, attraverso il lento e duro travaglio del pensiero e della scuola del nostro popolo dai primordi della sua costituzione sino all'odierna fioritura, in un cinquantennio di meditazioni e di lavoro, con l'azione e con lo studio percorse i successivi momenti della scuola dello stato italiano, e, attraverso l'ondeggiare delle correnti pedagogiche, ne intravide l'alta funzione Nazionale, Religiosa ed Umana, fu un solitario pensatore, che, silenziosamente, si fe' artefice della nuova scuola italiana: *Bernardino Varisco*, il nestero dei pensatori e degli educatori italiani, il Presidente della Societa Filosofia del nostro Paese. Attraverso la costante e feconda opera dell'insigne filosofo e del coscienzioso docente, imbevuta tutta di idealità e di religiosità, la pedagogia italiana, nella piena libertà delle sue manifestazioni, vien ritrovando la via per filosoficamente ascendere, da un Positivismo critico ed eclettico, ad una dottrina della Vita, che, nella conciliazione dell'Unità e della Molteplicità, nel riconoscimento della dualità di educatore e di educando, nel rispetto della individualità dei singoli e nel carattere nazionale ed umano dell'educazione, sempre più ci richiama verso una concezione filosofica della pedagogia armonica e comprensiva, secondo lo spirito del popolo italiano.

ON THE BASIS OF OBJECTIVE JUDGMENTS IN ETHICS

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SPEAKING on the problem of the basis of objective judgments in ethics, I beg leave to start from an apparently trivial consideration. I find that all objective judgments, be it in mathematics, natural sciences, psychology, ethics, or any other field of human thought are and must be *conditioned*. This is clearly realized in the natural sciences whose typical mode of speech is the hypothetical judgment. The fact is, however, easily overlooked in mathematics and in pure axiology, partly because the hypothetical presuppositions are expounded once for all in the course of scientific training or at the beginning of the works in question, partly because the most radical hypotheses can be stated in the briefest way. Few people seem to realize that just the most evident truth: "cogito ergo sum," or as Driesch has put it: "Ich habe etwas bewusst" is the most hypothetical proposition of all, for it is valid only on the assumption that we are entirely disinterested as to the concrete contents of the mental process in question. By doing this we make it universally applicable and can verify it at any given moment by mere introspection.

Let me make a few deductions from the above statement.

1. Reality, whether in its ultimate nature, or in the way it presents itself to and in finite minds, is something that "passeth all understanding." The only way to grapple with its overwhelming, ineffable fullness and variability is to reduce our thought about it to conceptual *schemes*, i.e., to make it conditioned, be it explicitly or in a more latent way.

2. To the degree in which we succeed in doing this, we can hope to attain evidence. The objective validity of our judgments increases in the same degree as we make thought rest on itself. The most abstract sciences, viz., mathematics and pure axiology are consequently the best ground for compelling logical thought. They have established the conditions of repeatable experience within the mind itself and wisely continue keeping aloof. This is true not only of mathematics, but, to a varying degree, of all objectively valid doctrines. There has, e.g., never been a natural process to tally with any of our natural laws, nor can there ever be. It is perfectly

justified, if we conclude that objective validity never goes along with reality. There is always more in reality than we can conceive, grasp, and tell.

3. Such judgments are never entirely independent of experience, partly because they refer us to introspective experience generally called evidence, partly because they rest on condensed former experience.

4. Each objective judgment, being conditioned, has a *competence of its own;* if we change its presuppositions, we are on ground where it is no longer valid. The case of non-Euclidean geometries pivoted on slightly different definitions of a tangent or parallel, or the strife between classical mechanics and the doctrine of relativity may serve as examples.

5. Conditioned thought is the very ground for apriori knowledge and apriori constructions which are common in all sciences. It is the relative apriori which has been rejected by Kant, but it is the only one I can detect by means of an analysis of *human* logical thought and its evolution.

Radically conditioned judgments, i.e., those based on strictly defined concepts, logical rules and introspective evidence, are by no means the original attitude of man towards the facts of his life. This is constituted by valuations. Valuations are more or less unconditioned judgments passed by concrete individuals upon concrete subjects. These bipolar relations of the ever-changing universe of individual mind to the ever-changing universe of conceived things seem to scorn all attempts at an objectification. We get lost in the labyrinth of individual, unique, unrepeatable value judgments. Nor do fashions, customs, traditions, and current ideals definitely fix the standard, for customs and traditions may change and dominant ideals be wrong, wildly wrong.

Where are we then to turn in our quest of a basis for objective judgments in ethics?

The solution has been sought for centuries in two opposite directions. The one method is aposteriori and traces up the psychological, biological, ethnological, sociological growth and change of moral ideas; the other is pivoted on apriori evidence. The conflict is serious, and it must be our earnest concern to look for a higher point of vision which would enable us to appreciate the respective merits of both by showing up their common basis. Let us briefly review the objections raised on both sides.

The apriorist is right, if he maintains that the average adherent of the psychological methods can only *describe* the way in which men arrive at certain moral standards without being able to solve the problem of final ethical sanctions. He is not able to conclude his argument, having based it on the actual results of moral behavior as hitherto observed. Utilitarians, hedonists, eudaemonists are not only unable to explain the ethical value of self-sacrifice, but are operating with standards which in themselves present weighty problems. Utility, pleasure, happiness are subjective tests. If we try to set up the ideal of *universal* utility or happiness, we enlarge the field of consideration beyond the knowledge of any human being. The hedonic calculus of Jeremy Bentham is impossible; and if it were possible, is it really an obligation? It is attractive, not compelling. Its acceptance depends on the character of man himself. But where is the basis for an *evaluation* of the valuator? On close scrutiny these methods generally prove to be vessels which won't hold water. They have no bottom.

But on the other hand, the empiricist is right, too, if he points to the meager results of apriori evaluations. What do they say about the burning issues of the day? Do they really teach us what to choose and leave in this complicated polyphonic age of ours? Is their high grade of evidence not purchased at the price of keeping aloof from real, immediate valuations? Is it not the professed aim of these thinkers from Brentano to Scheler to convey a knowledge about ethical values, and is not such knowledge a thing different from the complex process of actual choice? Is not Scheler obliged to put a vast number of words he uses into quotation marks just to show that they must be taken in some more strictly defined sense, and is not this another proof of the conditioned character of his doctrine? And above all is this knowledge about ethical values not based on a shifting, because conditioned, ground? It would be worth while to go over the admirable list of ethical value categories put forth in Max Scheler's well-known work (*Der Formalismus in der Ethik und die materiale Wertethik*) just to show how differently they would shape up, if we accepted slightly different divisions.

We have reviewed the main doubts. What then is the absolute basis for objective ethical judgments?

I believe there is such a basis, common to all these theories and able to put them in harmony with one another. But to find it we must dig deep enough. We must put aside positivistic scruples and boldly refer to the mysterious metaphysical reality. We must also submit the current opinions on the nature of experience to a thorough revision. There is much of the Kantian distrust of experience still lingering in philosophical thought. But I daresay that

Kant's fear of aposteriori experience was a little obsolete even in his time. Experience is surely assimilated by reason, but if there were no logical reason to work it, it would nevertheless never be a haphazard chaos of sensations. The laws of nature and even the mathematical laws are formed by reason, but they are formed under the guidance and pressure of Reality itself. Kant himself wavered on this point and the one sentence in which he acknowledged the existence of "special laws of nature" is a concession which refutes the main conception of the *Critique of Pure Reason.*

Yes, Reality, the Thing in Itself, does present itself in a lawful way. It does have a metaphysical Order to which all our formulas must conform. And I ask: Is there not a strain in this Order which directs the growth of morality? If we only listen to the footsteps of history, consider the causes of the rise, decay, and fall of human races, we find that men are constantly paying a heavy price for their moral errors — even men unknowing and blameless for their ignorance. We pay with our happiness, blood, and lives. All immoral foundations of civilization prove in the long run conducive to unbearable conditions. Poor men are slowly plodding along by trial and error. How sad it is to see their innocent children suffer, to see them driven like a flock of sheep by that terrific Force behind the screen! Aposteriori experience has proved convergent in physics and technology, but is it not convergent in moral life too? Is there not a kind of *moral selection* among men which is the very reverse of a mechanical natural selection? If we speak of human types, — the only way to grapple with the limitless variety of characters — do we not find that certain types are slowly being eliminated as worthless, pushed back among the criminals, without the aid of ethical theory, merely by experimenting upon life itself?

On this ground it becomes possible to draw a kind of parallel between the laws of nature and those of moral experience. It has long been recognized that the natural laws which have been arrived at in an empirical way are just as good as those which have been arrived at by mere logical, apriori deductions from some working hypothesis, as, e.g., the laws discovered by Galileo Galilei. A similar peace can be established between the empirical and the apriori methods in ethics. The former ones are not optional, because they are propped against the metaphysical Order, whilst the latter ones are not entirely independent of experience, because their apriori principles are but stabilized adaptations to the same Order which since time immemorial has moulded our ancestors willy-nilly into human and reasonable beings. Both groups of ethical theories are different, but equally justifiable, methods of approach; the one, concrete, nearer to the overwhelming variety of facts; the other, abstract, highly conditioned, but with the highest degree of certainty. The one chooses the facts, the other the hypotheses. They can both describe different aspects of what is actually given. Paulsen has already recognized that the ethical laws can only be stated in the form of tendencies. This applies to a more concrete treatment of the matter, because it is hard then to form a sufficiently circumscribed hypothesis for the judgments in question. But there may be transitions up to the sphere of evident axiological truths. It is a pity that they have seldom been attempted, because of the deeply rooted strife. The man who has a leaning toward apriori, highly conditioned evidence will be the *solid builder* who will preserve ethical values from being undermined and overthrown; his efforts may set up a barrier against any "Umwertung der Werte," especially if attempted by men less ingenuous and noble than Friedrich Nietzsche, — and we hope that his system of undeniable values may prove helpful in national and international social regulation. The empiricist, again, with his immediate and even statistical methods, will remain the *pioneer* and practical advisor, like John Stuart Mill, the champion of liberty and democracy and the liberator of women.

I confess that I know nothing about the ultimate nature of the Reality which presents itself to us in such a way. The ontological problem is most likely to remain a Sphinx forever. But my quest of a non-conditioned basis for moral judgments has led me to understand those who speak of the Force behind the screen in personal symbols, and confidently throw themselves into "His arms" with love and awe. *Philosophia quaeret, religio possidet.* But what I fail to understand is the confidence with which most scientists and many philosophers insist on their construction of a universe without meaning. This theoretical "corpse of the world," as Pierre Poiret termed it long ago, is the outcome of a misconception. For the elementary, impersonal laws of nature out of which it is constructed are not the actual metaphysical forces governing the irreversible changes in the world, but only conditioned laws for our thought concerning natural phenomena. All things being interrelated, there is no such thing as an elementary process within the universe. Men who thus forget the descriptive character of their natural laws are guilty of the offense with which they charge the philosophers, — a lapse into metaphysics.

I had to touch this subject, because I feel that we shall never come

to an agreement as to the basis of objective judgments in ethics, unless we clear the way to a higher point of vision. The whole difficulty is that the basis cannot be looked for in the realm of reason, human reason, since all its operations are logically conditioned. There is only one apriori which is neither relative nor conditioned. It is, to speak with Aristoteles, "τὸ πρότερον τῇ φύσει."

LES CATÉGORIES ÉTHIQUES ET LES VERTUS

K. Wize
(*Posen*)

SELON Louis Prat et son livre: *Les derniers entretiens de Charles Renouvier*, ce philosophe voulait, à la fin de sa vie, écrire un « petit livre, cent pages tout au plus. » Il souhaitait à ce livre une « assiette très solide, logique à la fois et psychologique. » Le point de départ serait une étude sur les catégories. C'était à son avis « la clé de tout. »

Si Renouvier a raison, on peut appliquer cette « clé de tout » à l'éthique aussi, à l'éthique conçue comme la science du bonheur et de la joie de vivre d'un être social, surtout à la distinction des aspects du bon et des vertus.

Ce fut Aristote qui, le premier, utilisa dans ses deux éthiques les catégories logiques pour fonder les aspects du *bon*, en quoi le suivit Suidas, l'auteur du dictionnaire de la langue grecque au moyen âge.

Dans les temps modernes, c'est Kant qui dans sa *Critique de la raison pratique* dressa « une table des aspects de la liberté. »

Non seulement cette table, mais aussi les essais les plus récents de Karman dont nous possédons une relation dans la communication du Congrès philosophique de Bologne, ne peuvent pas concourir avec la table des catégories du bon dressée par Aristote. Au reste Karman ne se base que sur les catégories logiques de Kant, l'une des plus vives réactions contre le bon sens et contre la parenté des catégories avec la langue de la part d'un rationaliste, acharné à combattre les faits de l'expérience positive.

Karman ne s'inquiète pas que même les plus hardis admirateurs de Kant, parmi lesquels je citerai Cohen de Marbourg, retournèrent à Aristote et à ses catégories, en faisant figurer parmi celles-ci le temps et l'espace que Kant avait exclus.

Revint aussi à Aristote le grand penseur de Montpellier, Charles Renouvier. Il en résulte que non pas les catégories de Kant, mais celles de Renouvier doivent servir de point de départ à tous ceux qui veulent approfondir le problème des catégories dans ses rapports avec le vrai, ou avec le beau, ou avec le bon.

Comme celles d'Aristote, les catégories de Renouvier peuvent être classées en trois groupes: relation, action, substance. La relation est la catégorie fondamentale. La catégorie de l'action englobe quatre catégories élémentaires: la qualité, la quantité, le temps et l'espace. La catégorie de l'action peut être dite dynamique, les catégories élémentaires — nous rappelons ici Kant — mathématiques; la qualité et l'espace seraient des catégories géometriques, la quantité et le temps seraient des catégories arithmétiques. La substance est la catégorie métaphysique, la catégorie suprême, auprès de laquelle toutes les autres catégories seraient des catégories accidentelles.

Ceux qui prennent interêt à la question des catégories s'apercevront de ce que nous nous distinguons un peu de Renouvier en général et aussi en particulier en nommant par exemple les catégories, les unes dynamiques, les autres mathématiques. Renouvier discerna des catégories dynamiques et statiques.

Quoiqu'on ne doive pas suivre Kant dans la construction des catégories ci-dessus énumérées, il faut cependant chercher chez lui les autres, surtout celles qu'il a appelées des catégories modales (basées sur des conclusions). Des conclusions, comme on le sait, on déduit des jugements. Contrairement aux idées simples qui étaient la source des catégories d'Aristote, les jugements et les conclusions sont une réunion et une résultante des idées et de leur combinaison. Les catégories des idées, des jugements et des conclusions donnent une base logique à la distinction des aspects du bon. Il importe qu'on les étudie particulièrement les unes après les autres.

De la catégorie fondamentale, de la relation, provient non seulement l'idée de la relativité du bon, mais aussi son évolution fondée sur la distinction, l'identification et sur la détermination. On voit que la catégorie de la relation, quoique relative, donne le plus sûr fondement de tout.

De la catégorie dynamique de l'action résulte le rapport du bon avec l'activité, avec la passivité et avec leur concurrence. L'homme de l'action est le vainqueur dans la plupart des cas, l'homme passif attend l'occasion, la concurrence de l'activité et de la passivité fournit les meilleures armes pour l'homme sage, l'homme du tact, pour le vrai homme d'état.

Les catégories géometriques de la qualité et de l'espace indiquent pour le bon l'importance de la nouveauté de ce qui est bien connu et de l'évolution et aussi du patriotisme, de l'exotique et du cosmique. La science du charme du nouveau pour tout le monde et surtout pour les peuples (comme les Gaulois selon César), de la certitude que donne ce qui est bien connu et des droits de l'évolution, cette science trouve ici son appui. L'antiquité de Platon ne connaissait pas l'évolution; elle est le mot d'ordre des temps modernes et des savants comme Boucher, Darwin, Liebig, Spencer, Haeckel. C'est au point de vue de l'espace que se résolvent les questions du climat et du milieu et les lois qui en résultent pour le patriotisme, l'exotisme et pour le cosmopolitisme.

Les catégories arithmétiques de la quantité et du temps donnent les espèces du bon d'une part de la puissance, de l'assiduité et de la modération (du juste milieu), d'autre part, de ce qui est bon pour le moment, pour la durée et pour l'éternité. L'importance du puissant en rapport avec le bon est compréhensible pour chacun qui aime ou déteste un Alexandre, un César, un Napoléon ou un Beethoven, de l'assiduité pour chacun qui pénètre dans l'examen de la vie d'un inventeur, comme Edison ou Marconi, de la modération pour celui qui reconnaît la valeur des caractères qui savent dominer leurs passions en vue des acquisitions les plus hautes. Mais, il faut y être comme un héros qui se maîtrise pour conquérir le Graal et non pas comme un Stoïcien qui se maîtrise pour renoncer. Le monde est, comme le peuple pour Verhaeren « à celui que le destin dota d'assez » puissantes mains pour manœuvrer la foudre et les tonnerres! Le temps règne sur ce qu'on peut nommer l'heure appelée, le καιρός des Grecs, ou l'heure sonnante de l'histoire, comme s'exprime un philosophe polonais Josef Kremer. La durée vaut mieux que le moment; l'éternité vainc tout.

La catégorie métaphysique de la substance révèle le mystère des idées capitales de l'humanité, l'idée de l'homme, du monde et de la divinité. L'homme, l'âme c'est moi et mes semblables, le monde c'est le non-moi, Dieu c'est le tout, l'absolu.

Les catégories des jugements ouvrent la question du bon, du mauvais et de l'harmonie entre eux, de leur conciliation, de ce qui est d'accord avec notre sort, qui nous laisse porter avec joie notre croix. De là proviennent toutes les théodicées depuis Héraclite et les Stoïciens jusqu'à Leibniz et les modernes. Une de ces théodicées nous enseigne qu'il y a même de *morbi felicissimi*, comme on connaît des *felicissimae culpae* et que, par exemple, la tuberculose, cette lance dans la poitrine d'Épaminondas, est peut-être le malheur des hommes, mais certainement le bonheur de l'humanité. Il n'y a presque pas un génie, pas un héros de l'esprit qui n'ait eu la phtisie ou une autre maladie menaçant la vie. C'est une théodicée qui n'est pas en désaccord avec la philosophie du Roi-Esprit de Stowacki, inspirée par Towiariski, une théodicée cosmique qui n'est pas bornée par la subjectivité d'une pauvre créature telle que l'homme sur le petit globe que nous nommons la terre.

Des jugements simples et complexes, on tire les conclusions. Ces dernières donnent naissance aux idées de la possibilité, de la vraisemblance et de la nécessité. Ces idées ont une grande importance pour toute orientation pratique. Toute notre âme et toute notre connaissance y visent comme nous le montrent les doctrines du prévidisme, du pragmatisme et aussi de l'hominisme, même si nous nous réfugions en des hypothèses et en des fictions au lieu de faits bien déterminés.

Les catégories logiques étayent les aspects logiques du bon, comme Aristote le comprend. Des données psychologiques proviennent les vertus, surtout les vertus cardinales, telles que nous les connaissons depuis Platon et Cicéron et aussi les vertus théologiques de St. Paul et d'Albert le Grand.

La sagesse, la première vertu cardinale, naît de la tendance de l'âme à s'instruire. L'âme veut connaître tout. Mais, pour certains, la foi, l'une des vertus théologiques, importe plus que connaissance et sagesse. Certainement, la foi est bonne, surtout pour la masse, mais pas toujours pour le génie. Aristote voyait le plus haut bonheur dans la contemplation du vrai et de son synonyme: de la Divinité.

La seconde vertu cardinale, la tempérance, a sa source dans la faculté psychologique de la passion. Elle est bonne pour les Stoïciens et pour tous ceux qui veulent être des serviteurs ou des anachorètes. C'est le rationaliste et l'idéaliste Platon qui lui attribua une primauté sur l'enthousiasme du matérialiste Démocrite. L'enthousiasme est la vertu des héros grecs: Hercule, Thésée, Épaminondas et des héros des autres nations: Héraclius, le Cid, Jeanne d'Arc, Washington, Lafayette, Kosciusko, Pulawski, Mazzini, Garibaldi et aussi du héros symbolique de nos jours, du soldat inconnu! Ce n'est pas le fameux « μηδὲν ἄγαν » du philosophe grec avant et après et malgré Democrite, mais le *plus ultra* des étendards de la Castille qui fait la conquête du monde et nous a montré la route des Amériques et aussi les chemins de l'esprit « si loin dans l'ombre et l'inconnu que notre désir n'est point encore jusqu'à aujourd'hui du bout du monde revenu, » comme chante Émile Verhaeren, un des propagateurs modernes du culte de l'enthousiasme. Grâce à l'enthousiasme des processions et des foules règne l'Église et régnent aussi les chefs des armées triomphantes, grâce à l'enthousiasme le savant envoie ses antennes de l'esprit jusqu'aux astres de l'universe!

La troisième vertu cardinale, c'est le courage. La dépendence à l'égard de la faculté psychologique de la volonté est évidente. Elle est la vertu qui alliée à la vertu théologique de l'espérance soutient et porte le mieux le héros enthousiasmé. Nous la vénérons tous.

La quatrième vertu cardinale, celle de la justice est, selon Cicéron en rapport avec l'instinct social. L'instinct social et l'assimilation psychique ont les mêmes racines. Il y a une assimilation spontanée, la sympathie, et une assimilation communiquée surtout par la langue, prononcée ou écrite. De la première résulte comme motif éthique: l'imitation je vous rappelle ici Tarde — et ce qui est à la base de l'imitation: l'invention, de l'autre, la coërcition — je vous rappelle ici Durkheim et Wundt et aussi tous ceux qui croient à des idées-forces, comme Cieszkowski et Fouillée, ou à des forces hypostatiques, comme Bostroem et Supiriski. La vertu de la justice cependant n'est bonne que pour les juges et les vainqueurs non pas avant, mais après la victoire. Il y a autant de justices que de peuples et que de personnes et aussi — que de vérités historiques! La vertu sociale par laquelle nous pouvons être des héros, des saints, des hommes dans le meilleur sens du mot, est et restera pour toujours la vertu de St. Paul, la vertu théologique de l'amour!

Les aspects du bon, appuyés sur les catégories logiques, de même les quatre vertus cardinales au sens moderne, de la sagesse, de l'enthousiasme, du courage et de l'amour, appuyées sur les faits psychologiques, attestent que Charles Renouvier, l'éminent philosophe de Montpellier, avait complètement raison en voyant dans la méthode « logique à la fois et psychologique » — la clé de tout!

Division D

HISTORY OF PHILOSOPHY

1. GENERAL SESSION

Time: Wednesday, September 15, 2.30 P.M.
Place: New Lecture Hall
Subject: The Rôle of Philosophy in the History of Civilization
Chairmen: A. C. ARMSTRONG, Wesleyan
ALEXANDER MEIKLEJOHN, Wisconsin

THE RÔLE OF PHILOSOPHY IN CIVILIZATION

HENRY OSBORN TAYLOR
(*New York*)

THERE is no need to speak before this audience of the wisdom, the tranquillity of mind and human tolerance, which philosophy has brought to men, and more especially to its votaries, throughout the ages. I confine myself to what seems to me its more specific historic rôle.

Philosophy responds to the intellectual desire to think things out, and may for our purposes be characterized as ultimate consideration, ultimate rational consideration of any problem pressing on the mind. When such consideration draws near to the solution, or the final abandonment, of a problem, it emerges into the stage of reasoned formulation or statement. Philosophy is ultimate consideration and statement, whether, for instance, its subject be conceived as very being or reality, or more richly as the quest of truth and life. While predominantly intellectual in function and method, philosophy does not confine itself to strictly intellectual problems, but will consider any matter of deep human interest — science, art, religion, conduct, institutions. My thesis is that the rôle of philosophy in the history of civilization consists in the methodical application or direction of ultimate rational consideration, and formulated statement, to the various matters of absorbing interest which successively have pressed upon the human mind.

Impelled by its own nature, which flows from the mind's importunity, philosophy perseveres in its task. Recognizing the insistency, or it may be, the imperative validity, of its own rational procedure, it endeavors to apply its methods of ultimate consideration and logical statement to whatever convictions for the time meet general acceptances among thoughtful men. It will test these convictions, reject some of them, and present in rationalized form those which it can accept. Thus it constructs a system.

A system of philosophy cannot avoid reflecting the dominant intellectual or spiritual interests of its epoch. The more creative the master mind that forms the system, the more genially will it use the elements of its time. No mind can lift itself altogether from the knowledge and spiritual interests which cradle it. It cannot fail to be stamped by them, or interested or intrigued. If an outstanding genius find phases of contemporary thought repellent, his mind, for that very reason, will rebound at an angle and fly in a direction that it would not otherwise have taken.

My illustrations might open with the Indian Upanishads, which fashioned into a metaphysical system the detestations as well as the ideals of thoughtful Indians. Through a prodigious dialectic these compositions created an Absolute as a longed for refuge from an execrated world of change and death.

Gotama's dissenting reasoning could find no absolute. Yet a similar view of life and like temperamental needs impelled him to construct an equivalent goal in Nirvana. Buddhism, like Brahmanism, was a system of religion and ethics as well as a philosophy.

Our ancestral friends, the Ionian Greeks, took account of the knowledge and varied interests of themselves and their keen-minded countrymen. They philosophized regarding the phenomena of the natural world, and came to large conclusions. The line leads on, say through Parmenides and Pythagoras, Heracleitus, Anaxagoras, and Democritus, to Socrates, Plato, and Aristotle.

Socrates was the most philosophical of his own Athenians, who loved to discuss with him the things his and their minds were busy with. They were fruitfully seeking a better method of thinking and clearer ideas. No more than Socrates, was Plato detached from the intellectual world of which he was the star. He knew the philosophies before him, and the mathematics and physics of his time. The knowledge and intelligence of others winged his own flights of thought. Still more palpably the system of Aristotle embraced contemporary and past intellectual interests; and each volume, small or great, in his Encyclopaedia, was in some way a fosterling of the intellectual world about him, however directly it was the offspring of the Stagirite. More notably than any predecessor, or any successor for that matter, he fulfilled the philosopher's task of constructing a rational system, or systems, out of the intellectual elements of his time, to which his own thoughts and researches genially contributed. Both Plato and Aristotle gave full thought to the question of human welfare, the *summum bonum* for man. They rounded out their philosophies with this final consideration.

A period followed when men were much concerned with their lives, which they could not control. They sought escape from the assaults of Fortune. In a world of ageing enthusiasms, philosophy lost the spirit of intellectual discovery, and set itself to secure a happy life for the philosopher. Stoicism rationalized and made firm the spiritual freedom and peace which man may find within himself, in character and strength of will, and in virtue which consists in rational thinking and acting. Philosophy became in Stoicism an adjustment of human conduct with a definite view of man and the world in which God had put him. The system of Epicurus was also sheer adjustment, with less serious endeavor to base its practical principles upon knowledge of man and nature. Both systems endangered the progress of ethics, with which they more vitally were concerned. For whenever the quest of knowledge weakens, ethics loses the enlarging basis needed for ethical advance. And the soul's calm is won more surely through the full employment of the highest energies of the mind.

It was a time of growing cosmopolitanism. Stoicism accorded with this good tendency more strongly than Epicureanism. For Stoic virtue was benevolently social. The wise man knew himself a citizen of the world. Fulfilment of his private and public duties helped to insure his calm.

But again the times were changing, as the world entered upon what is sardonically called the Christian Era. Men were looking for divine deliverance from earth's unstable dross. Embodying phases of the later Stoicism, Neo-platonism gathered to itself the yearnings of the pagan world. It was a philosophy, indeed a strenuous metaphysic. It drew into its system much of the period's spiritual strength as well as need, the intellectual power of the time and its prevailing conviction of the intellect's inadequacy. Neo-platonism justified its descent from Plato by its catholic purpose — intellectual as well as religious. It would bring the disciple to complete and final well-being. This should be won through strenuous thinking and through holy living, the soul holding itself aloof from the evils of the world and set upon its return to the Spirit whence it came. The rarer summit of salvation was mystic union with the final source of life, — an intuition of the Absolute, a passing taste of eternity, the soul loosed from the bonds of time and locality.

Following hard on this pagan philosophy came the philosophy or theology of the Christian faith. It absorbed many elements of the Neo-platonism which it supplanted. The first stage was the formulation of the Creed and further authoritative dogma. It was a process of rationalization and at the same time an adaptation of the faith to the precise apprehension of a world educated in Greek thought. This work, primarily of the Greek and then of the Latin fathers of the fourth and fifth centuries, was assuredly an application of philosophic consideration and ultimate dialectic to the main intellectual and spiritual interests of the age, and a rationalized expression of them.

A second stage of this philosophical theology is found in the further systematization and explication of dogma by the great scholastics of the Middle Ages. The ninth and tenth centuries rearranged the patristic matter, and sharpened certain points of doctrine. Through the periods following, the patristic material was worked over, its problems thought upon and disentangled into more explicit statement. The treatment becomes more reconstructive, and a larger knowledge of Greek philosophy is recaptured from the past and utilized in this procedure. The antique leaven is for a while mainly Platonic or Neo-platonic; then comes a fuller use of the logical writings of Aristotle; and at last in the thirteenth century the substantial philosophy of the Master is applied to the systematization and rationalization of the dogmatic scheme of salvation, and, so far as may be, is worked into it. Thus the great constructive *Summa Theologiae* is achieved in its serried syllogistic structure by Albert and Thomas. It was an all-embracing exposition of God, so far as He might be known in His Unity and Trinity; of the corporeal and incorporeal world created by Him, and especially man, with his twofold nature and his qualities; of the manner of human and angelic cognition; of man's relationship to God and final destiny. All was presented in its bearing on salvation.

The *Summa*, that is, the *Summa Theologiae* with its auxiliary *Summa contra Gentiles*, was a complete formulation of the supreme spiritual and intellectual interests of the mediaeval period, and thus for that time a true fulfilment of the function of that ultimate rational consideration, which is philosophy.

The kind of curiosity which results in science did not prevail in the Middle Ages. But, in the centuries following, an insistent curiosity as to Nature thrust itself and its new found validities upon the attention of philosophy. Thereupon the more progressive phases of thought set about comprehending these new tendencies and their advances in knowledge, which might offer a new view of the universe. A chief business of philosophy henceforth was to rationalize and systematize them.

In the fifteenth century Nicholas of Cusa offered a possible solvent of scholasticism through his principle of *docta ignorantia*, or instructed ignorance, which cast judicious doubts upon the human capacity for absolute truth. Turning to physical speculation, he found the universe in motion, including the earth, which he would no longer regard as the center of the world. He brought to the fore problems of physics and mechanics, and made observations and experiments.

Cusa's reasoning might help to prepare men's minds for the coming revolution in astronomy. And Leonardo, born a little while before Cusa's death, took up the consideration of the rolling world, and became insatiate in physical and anatomical investigation. Not very long after he died, there appeared in one eventful year, 1543, the *De Revolutionibus* of Copernicus and the *De Humani Corporis Fabrica* of Vesalius. Intellectual men were henceforth to interest themselves in astronomy, physics, and biology as they had not since the days of the Alexandrian physicians and astronomers, two or three centuries before Christ. Philosophy quickly turned to the new knowledge; and in its rôle of ultimate rational consideration, set itself to criticize and aid. Cusa's revolt against scholasticism was carried through, and philosophy shook itself free, not indeed from the teachings of the Greeks, but from slavery to their authority. The greatest Greeks had differed in opinion. Humanists and philosophers of the fifteenth and sixteenth centuries would now set the august form of Plato against the assertions of his pupil; and in time the views of the old atomists and even the Eleatics were brought forward and compared.

A surging and magnificent confusion pervades the thinking of these new philosophers — Telesio, Campanella, Bruno, all south Italians. They felt the rising wind, and set their faces toward the future. Theirs should be philosophies of Nature, — the great infinite Nature and the God of Nature, whose action and energy swept through the universe. Our celestial voyagers spurned scholasticism; and if they made no sure use of tested basic principles, many a bold thought, at least of Bruno, was to win confirmation long after his tragic death in the year 1600.

Francis Bacon (1560–1626) follows close upon them. His philosophy, futile in much of its specific content, was inspiring in its purport and envisagement. I have not mentioned his great namesake, Roger Bacon, because I am keeping to dominant currents, and the work of Roger did not fall in with them. It might have, had he lived when Francis more fortunately saw the light. Who has not been struck by the startling affinity between the two, which pervaded alike their torrential denunciations and their constructive schemes? The older man was for his time the better scientist. The younger would not recognize the new discoveries — the circulation of the blood, "the diurnal motion of the earth, which he was convinced is most false," even after he knew of Galileo's discovery of the moons of Jupiter and proof of their revolutions.

Both Roger and Francis set forth an experimental and inductive method of reaching the whole truth of Nature. Roger's *scientia experimentalis* fell dead; Francis's method was unworkable. But the spirit of his time spoke in his prodigious plan "to commence a total reconstruction of sciences, arts, and all human knowledge, raised upon the proper foundation." That spirit found voice again in Bacon's words touching man's noblest ambition to "extend the power and dominion of the human race over the universe;" an empire which "depends wholly on the arts and sciences. For we cannot command Nature except by obeying her."

Descartes, younger than Bacon, a more consummate metaphysician and a better scientist, also lays stress upon the practical and scientific purpose of philosophy. "All philosophy is a tree, of which the roots are metaphysics, the trunk physics, and the branches springing from the trunk are all the other sciences, which are comprised under the chief heads of medicine, mechanics and ethics."

Being a philosopher, Descartes relied primarily upon *a priori* reasoning for the discovery of truth; yet his knowledge kept abreast of the physics of Galileo and the physiology of Harvey; and he strove to bring the reality of facts within the logic of ideas.

So we see that when science raised its head again, and asserted its claims, philosophy quickly addressed itself to consider them, even as it had always striven to give rational form to the master interests of other ages.

Accordingly, with the advent of a novel rush of intellectual interests in the sixteenth and seventeenth centuries, philosophy broadened to include them in its view. Hobbes and Locke may revolt from metaphysics in the older dogmatic sense, but all the more they seek to consider the realities of human life and thinking. The philosophic task is recognized as embracing the whole nature of man and his various achievements, his psychology, his ethics, politics, religion, as well as his way to knowledge through the direct and experimental investigation of natural facts. "The proper study of mankind is man," and all his interests.

Mathematics, including its sweeping application to physics, had been drawn into philosophy with Descartes, under the impulsion of his own genius and the incitement of Galileo's achievements. An equally great mathematician, Leibniz, sought to join mathematical and mechanistic conceptions of the world to a teleology leaning toward religion. Natural science must be harmonized with man's insistent aspirations. The endeavor of this omniscient thinker was prophetic of the immense rôle to be taken by the conflict between mechanism and teleology in modern thought, scientific as well as philosophic.

Yet, that mathematics was not philosophy might appear in the difference between Descartes's fundamental certainty springing from intuitive consciousness, the *cogito ergo sum*, and Galileo's search for elemental or indicative magnitudes, to serve as methods of statement and means of measurement for the movements of the universe. Immanuel Kant was to render sharp and explicit this difference between mathematics as a science of rationally and necessarily constructed sequences and magnitudes, and philosophy as a system of ultimate conceptions.

It was through mathematics and physics that Kant passed on to his final vocation of finding an ultimate basis in critical thought for a consistent treatment of the natural world. The first production of this youth of twenty-two, in the year 1746, set itself to point out the faulty methods of Leibniz and others in physics and metaphysics, and show the need of a true metaphysics for the solution of the problems of physics. This was followed a few years later by the "Essay on the Constitution and Mechanical Origin of the Cosmos, Treated in Accordance with the Principles of Newton." Newton had explained the movements of heavenly bodies. Kant would explain the origin of these movements. To this end he presented the first statement of what is called The Nebular Hypothesis.

In order to provide an assured foundation in ultimate thinking for this or any system of physics, Kant set himself to solve the problem, how do we know? — or, as put in his famous symbol, how are synthetic judgments *a priori* possible? Thus, from a mathematical physicist, he became a metaphysician. He was occupied with universal forms of thought, also with the limitations upon rational thinking. Men must look elsewhere for assurance of God, of freedom, and of immortality. Kant's arguments, and the bounds set by him to their efficacy, pressed on to ethics, law, religion. They became stamped with the profundity of his ethical and religious feeling.

Afterwards, with Schleiermacher and others, who drew from Spinoza as well as from Kant, a philosophy suited to the temperaments of ardent men applied itself to religion and art. In Goethe's Germany Spinoza exerted an influence second only to the critical philosopher who pierced his system. Also, after Kant, Fichte and Schelling, soaring to heights of romantic idealism, were assuredly ethical, but were too strongly repelled by the mechanical views of science to consider its data seriously.

Then Hegel. He was no physicist. He did not actually work with the data of natural science, the method of which he deemed inchoate and defective. Yet its empirical results were to be recognized and drawn within the ascending spirals of his philosophic thinking. In the vast extension of his system he sought to include, interpret, and construe, the whole volume of past and present thought in its continuous evolution. History was no record, but a self-evolving continuum. *The History of Philosophy* was the organic process of ultimate thinking: it was the time-genesis and progress of thought, finding and producing itself in cumulative systems. *The Philosophy of History* was the rational unification of whatever might form a subject of thought. As the progressive process of the Spirit, thought's upward eddying spirals were all-embracing. Of course, religion entered the Hegelian scheme.

The hundred years which have elapsed since Hegel's death have delivered the world over, not indeed to reason, but to science. Philosophy has sought to include the results within the scope of its consideration. It has tried for this, whether repelled by science, or itself aping laboratory methods. In France philosophers have been partial scientists — the line of Descartes, Pascal, the Encyclopaedists, Comte, Renouvier, and Bergson tells the story. In England Herbert Spencer was as much of a scientist as a philosopher. So William James in America.

And today, synthetically and profoundly, philosophy, which is still ultimate rational consideration, is considering the validity of the methods and conclusions of physical science. It is seeking to accommodate and harmonize these methods and conclusions with

the totality of human experience and conviction. It is even seeking to bring to bear on science philosophy's own enlarging relations with the validities of art and religion. For it wishes to include in its ultimate verdicts the evidence of human faculties which seem to function beyond the pale of the discursive reason.

LE RÔLE DE LA PHILOSOPHIE DANS L'HISTOIRE DE LA CIVILISATION

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IL semble d'abord naturel d'interroger l'histoire de la philosophie sur le rôle de la philosophie dans l'histoire de la civilisation. Toutefois, à la réflexion, l'impartialité d'un tel témoin apparaît de moins en moins évidente. C'est que l'histoire de la philosophie est elle-même chargée de philosophie. Auguste Comte, Hegel et Bergson résoudraient sans doute le problème de manières fort différentes, parce qu'ils n'ont la même idée ni de la philosophie, ni de la civilisation. Même les historiens les plus libres en apparence de toute métaphysique règlent leur pratique sur des principes inavoués, qui imposent à leurs recherches des méthodes définies et en prédéterminent jusqu'à un certain point les résultats.

D'une manière générale et toute schématique, les tendances entre lesquelles se partagent les historiens de la philosophie se ramènent à trois. Selon certains, c'est en dehors de lui-même que tout système de philosophie trouve son explication dernière. Bien qu'elles semblent jaillir du génie de leur auteur, les grandes doctrines apparaissent finalement comme les produits nécessaires de causes que l'histoire a pour fin de retrouver. Herder, Taine, Karl Marx ou Durkheim peuvent ne pas s'accorder sur la nature des facteurs déterminants dont les philosophies résultent; tous s'accordent pour les interpréter en fonction d'éléments, physiques ou sociaux, extérieurs à la personnalité du philosophe et dont cette personnalité même n'est qu'un effet particulier.

Pour d'autres, au contraire, toute tentative de réduire une philosophie à ses facteurs historiques et sociaux est vouée d'avance à un échec certain. Nul ne songe à nier que les philosophes dépendent de leur temps et de leur milieu social, et il est également évident que tous utilisent des philosophies antérieures lorsqu'ils construisent leur propre doctrine. La question est simplement de savoir si l'on peut comprendre un philosophe en ne tenant compte que de tout ce qui n'est pas lui. Pour de tels historiens, l'objet propre de l'histoire est au contraire de dépasser la matérialité même du système une fois construit et, négligeant l'œuvre déjà faite, de retrouver par delà les sources où elle puise, par delà même les concepts et les images où elle s'exprime, l'intuition originale qui l'engendra.

D'autres enfin ne sont sensibles ni à ce que le milieu social impose au philosophe, ni à l'effort libre par lequel le philosophe écarte ces contraintes. La philosophie est avant tout l'amour de la sagesse et il n'est pas de sagesse sans vérité. Or la vérité ne dépend ni de la société, ni du génie créateur des philosophes; elle est la vérité. Certes, nul ne peut se flatter de la posséder à lui seul et tout entière, mais son contenu se manifeste peu à peu, sous l'effort séculaire des chercheurs qui la découvrent. Ainsi, qu'on les considère dans leur filiation historique ou dans leur structure individuelle, les systèmes de philosophie apparaissent comme conditionnés uniquement par les relations nécessaires que nouent entre elles les idées. Négligeant comme accidentels tous les éléments historiques, sociaux ou individuels qui entrent dans la composition des systèmes, l'histoire de la philosophie ainsi entendue ne retient que leur valeur propre de vérité: elle est essentiellement philosophie.

Il est à peine besoin d'observer qu'à ces trois interprétations de l'histoire de la philosophie correspondent nécessairement trois points de vue différents sur le rôle de la philosophie dans l'histoire de la civilisation. Si les philosophies peuvent historiquement se dissoudre en éléments empruntés aux milieux sociaux qui leur ont donné naissance, tout système est l'expression idéologique d'un état donné de la civilisation. Si, au contraire, les systèmes sont les produits originaux et imprévisibles d'une activité créatrice, la philosophie ne résulte plus de la civilisation, elle la crée; le philosophe n'est plus un homme représentatif, à la manière d'Emerson, mais un héros, à la manière de Carlyle. Si enfin les systèmes ne sont que les expressions d'une vérité intemporelle, dominant les sociétés et les hommes, qui se découvre progressivement à la méditation des philosophes, la philosophie n'est ni effet ni cause, mais transcendante, à l'égard de tout état donné de la civilisation. L'histoire nous permet-elle de choisir entre ces interprétations ou de rendre justice à ce que chacune d'elles contient de vérité?

Tout d'abord, une constatation s'impose. Quel que soit le système de philosophie que l'histoire étudie, l'hypothèse d'une génération spontanée se trouve démentie par les faits. Même pour des philosophies aussi lointaines que celle de Platon, et dont l'origine nous échappe, il devient de plus en plus évident qu'elles étaient des réponses à des questions posées par un état donné de la science et de la société. Le fait est plus indiscutable encore lorsque les recherches portent sur des doctrines dont les antécédents nous sont connus. Nul ne songerait à interpréter le système de saint Thomas d'Aquin sans prendre en considération la philosophie d'Aristote, la théologie de saint Augustin et le dogme catholique, qui en sont les parties intégrantes. Il est clair que Descartes lui-même doit beaucoup à la physique mathématique de son temps, à la philosophie corpusculaire de XVI^e^ siècle finissant et à la métaphysique de saint Augustin. C'est encore saint Augustin qui se combine avec le mécanisme cartésien pour engendrer la philosophie de Malebranche. Vers la fin du XVIII^e^ siècle, le criticisme de Kant naît d'un effort pour résoudre ces deux questions: à quelles conditions la physique de Newton et la morale piétiste sont-elles possibles? Au début du XIX^e^, Auguste Comte se demande comment les principes critiques de J.-J. Rousseau et de Condorcet pourraient être réconciliés avec les principes organiques de Bonald et Joseph de Maistre. Il n'est pas une philosophie qui ne plonge de profondes racines dans le milieu social où elle a pris naissance, et le fait ne saurait guère être discuté. C'est ce qui légitime et rend même obligatoire pour l'historien de la philosophie l'étude des sources de chaque doctrine. Plus la pensée qu'il analyse est puissante, originale, plus elle se révèle réceptive, assimilatrice. Un Platon, un Leibniz, sont des consciences coextensives à celle de leur temps, et davantage. C'est pourquoi chaque grande philosophie est d'abord un belvédère d'où se découvre à nos regards la civilisation dont elle est la somme; mais elle n'est pas que cela.

Si manifeste, en effet, que soit l'influence du milieu social et de la civilisation sur un système philosophique, elle ne suffit pas à en expliquer complètement la genèse; il en dépend, mais il n'en résulte pas. Admettons que le philosophe eût trouvé à sa disposition tous les éléments dont se compose son système, ces mêmes éléments se trouvaient au même moment à la disposition de tous ceux qui se trouvaient soumis aux mêmes influences sociales. Pourquoi, dès lors, chaque philosophie apparaît-elle sous la forme d'un exemplaire unique, irréductible en dernière analyse à l'un quelconque des systèmes antécédents? Car cette deuxième expérience historique n'est pas moins constante que la première. Tout, d'un système philosophique, peut être emprunté, et cependant, même alors qu'il répète littéralement les formules de ses prédécesseurs, le vrai philosophe leur confère un sens qui n'appartient qu'à lui; s'il emploie les mêmes mots, ce n'est jamais pour dire les mêmes choses. Pour s'en convaincre, il suffit de se souvenir que la définition de la substance est la même chez Aristote, saint Thomas d'Aquin, Descartes et Spinoza. Ainsi, celui qui veut accepter intégralement les données du problème tel que le pose l'histoire de la philosophie, se trouve pris entre les deux termes de cette antinomie: toute philosophie est directement fonction de la civilisation qu'elle exprime, et cependant il y a toujours en elle autre chose et plus que les éléments qu'elle a empruntés.

Lorsqu'on cherche la cause de ce fait, on constate d'abord que si les grands philosophes sont éminemment représentatifs de leur temps, ce n'est pas seulement parce qu'ils en ont recueilli les idées, mais parce qu'ils en ont essayé la synthèse. Les courants intellectuels d'une époque ne se composent pas d'eux-mêmes dans les consciences individuelles, ils s'y heurtent, chacun d'eux s'affirmant pour soi-même et paraissant incapable de progresser à moins qu'il ne supprime les autres. Il existe ainsi, à chaque époque, une multitude de consciences qui sont le lieu de ce conflit et qui le souffrent passivement, sans pouvoir faire plus que d'affirmer simultanément ces valeurs spirituelles à la fois nécessaires et contradictoires. Déchirement intérieur que nous connaissons tous, auquel nous nous avouons incapables de mettre un terme, et qui ne comporte que deux issues. Ou bien l'oubli, le refus de la lutte et la chute consentie dans un scepticisme qui n'est qu'un lâche suicide de la pensée; ou bien l'effort patient pour maintenir vivantes toutes les valeurs spirituelles vraies jusqu'au jour où elles retrouveront pour un temps leur équilibre dans la pensée d'un grand philosophe.

Rien n'était plus commun, au XIII^e^ siècle, que des esprits partagés entre la tradition théologique de saint Augustin et les nouvelles doctrines d'Aristote; la grandeur de saint Thomas d'Aquin fut de surmonter le conflit et de montrer que les deux vérités en apparence antagonistes n'étaient réellement qu'une vérité. Descartes, au XVII^e^ siècle, pense pour tous ceux qui veulent une physique mathématique, comme celle de Galilée, sans abandonner les grandes vérités de Dieu et de l'âme; il prouve donc pour eux que ces thèses métaphysiques sont les fondements obligés de la vraie physique: un Dieu parfait et véridique, une âme réellement distincte du corps ouvrent la voie devant une physique de l'étendue et du mouvement. Comment maintenir cette même existence de Dieu et de l'âme, au XVIII^e^ siècle, devant l'idéal scientifique qu'impose aux esprits la physique de Newton? Kant résout le problème par une double critique de la raison, qui montre à la fois à quelles conditions une physique et une morale sont possibles. Qui va satisfaire aux exigences contradictoires des principes critiques et des principes organiques, à l'aube du XIX^{e} siècle français? Auguste Comte, dont tout le système est la patiente et laborieuse démonstration de cette vérité que le progrès est le développement de l'ordre.

Lorsqu'on les envisage sous cet aspect, la philosophie laisse clairement apercevoir ce qu'elle reçoit, ce qu'elle apporte et la grandeur du rôle qu'elle joue dans l'histoire de la civilisation. Elle ne se contente pas de l'exprimer et de la représenter, elle la fait et elle la crée. Chaque grande philosophie nous apparaît en effet comme la solution individuelle d'un conflit spirituel collectif. Sans la civilisation dont il reçoit les données initiales de son problème, le philosophe serait une conscience vide; sans le philosophe qui pense pour elle, la société serait une poussière de consciences contradictoires entre elles et dont chacune, prise à part, serait divisée contre elle-même et partagée. Or la pensée tend spontanément à réaliser l'unité sans laquelle il n'est point d'ordre ni de paix; cette pureté et cette paix ne se trouvent que dans l'accord des idées entre elles, des sentiments entre eux et avec idées, des actions enfin avec les sentiments et les idées. Mais c'est l'accord des idées qui constitue la base de tout l'édifice et prépare, par delà l'accord de chacun avec soi-même, l'accord des hommes entre eux. En pensant pour soi le philosophe pense donc pour tous les hommes; c'est lui qui rétablit l'équilibre toujours mouvant des valeurs spirituelles et, en assurant leur ordre, rend possible leur progrès.

Mais ce n'est pas tout. Si la philosophie n'avait d'autre fonction que d'amener chaque civilisation à la claire conscience d'elle-même, sa portée ne dépasserait pas la durée de la civilisation qu'elle exprime. Or deux faits au moins nous interdisent d'admettre qu'il en soit ainsi. D'abord, nous avons tous expérimenté par nous-mêmes que ce ne sont pas seulement William James et Bergson, mais aussi Platon et Aristote qui ont aujourd'hui encore quelque chose à nous dire. Certes, il nous faut du temps pour comprendre qu'ils sont anciens, mais qu'ils ne sont pas vieux; leur aspect représentatif nous cache d'abord ce qu'ils contiennent de vérité éternelle; peu à peu, néanmoins, nous atteignons par delà l'accidentel et l'historique, l'élément intemporel qui fait de tels hommes les perpétuels contemporains de toute raison humaine.

De plus, la manière même dont ils ont accompli leur tâche suppose la présence d'un élément dont la valeur dépasse celle de tout état donné d'une civilisation quelconque. Toutes les grandes philosophies ont été des efforts de conciliation, aucune n'a jamais été un éclectisme. Le vrai philosophe ne cherche pas l'accord des idées dans les concessions mutuelles qu'elles pourraient se consentir, car elles ne peuvent s'en consentir aucune. Quelle que soit l'époque ou la forme de la civilisation dont il dépend, le philosophe se trouve, en présence des idées, comme devant des essences nécessaires, dont le contenu échappe au libre arbitre de sa volonté. Ce qu'il peut faire, c'est dégager l'une d'elles à l'état pur, de la reconnaître pour ainsi dire. Bien loin de l'adapter aux autres, il s'efforce de lui rendre pleine justice en la libérant de tout ce qui n'est pas nécessairement contenu dans son essence et sa doctrine n'est en définitive rien d'autre que l'univers pensé en fonction de cette essence. Toute philosophie est une expérience métaphysique poussée à fond sur le contenu d'une idée. De là un nouveau caractère de la philosophie et une dernière conclusion touchant la place qu'elle occupe dans l'histoire de la civilisation.

Chaque fois, en effet, que l'historien de la philosophie atteint le point central de l'une des doctrines qu'il étudie, il constate que son auteur ne se proposait nullement d'arbitrer les différends qui divisaient ses prédécesseurs, mais bien de les faire évanouir. Le résultat le plus évident auquel chaque grand philosophe a conscience de parvenir, c'est de dissoudre les contradictions, en trouvant que les problèmes dont les solutions semblent contradictoires sont en réalité de faux problèmes. Toutes les antinomies fondent et s'évanouissent au contact de l'idée que l'analyse métaphysique vient pour la première fois de degager dans toute sa pureté. Nulle part cette ambition de tout vrai philosophe ne s'est exprimée plus clairement que dans la *Dialectique transcendentale* de Kant, mais on peut dire qu'un un sens, toute métaphysique est la solution transcendentale de semblables antinomies: elle supprime les oppositions en les dépassant. L'Idée platonicienne est l'au-delà d'où l'être de Parménide et le devenir d'Héraclite apparaissent comme deux illusions. La Nature analogique de saint Thomas satisfait à la fois les droits de Dieu et ceux de la créature en faisant apparaître le Dieu de Denys l'Aréopagite comme postulé par l'univers d'Aristote. Le *Je pense* de Descartes est le point de vue de la pensée pure, d'où le psychisme d'Aristote lui apparaît comme un faux spiritualisme et l'atomisme d'Épicure comme un matérialisme sans fondement. Dans le positivisme d'Auguste Comte, la loi des trois états et l'idée d'humanité qu'elle explicite éliminent simultanément les principes critiques du XVIII^e siècle comme anarchiques et les principes conservateurs de la Restauration comme rétrogrades. Plus près de nous, enfin, la durée pure de Bergson pense faire évanouir comme illusoire l'antithèse de la liberté et du déterminisme, dissout les contradictions internes du parallélisme psycho-physiologique dans l'homme et d'une évolution statique dans l'univers. L'histoire de la philosophie tout entière n'est que l'histoire de cette expérience sans cesse recommencée.

On comprend dès lors pourquoi les grands systèmes offrent à la pensée un intérêt plus vaste que celui de la civilisation particulière qu'ils expriment. Par delà les problèmes que chaque génération se pose, il y a les problèmes que l'homme se pose. En fait, comme il suffit d'aller au fond de soi-même pour se dépasser, il suffit de réduire les idées à leurs essences pures pour les rendre nécessaires et universelles. Le philosophe opère cette réduction. C'est pourquoi tout se passe comme si l'histoire de la philosophie, prise dans son ensemble, était celle d'une vaste enquête sur le contenu de la pensée humaine. Enquête sans cesse reprise, et toujours élargie, qui révèle les essences à l'intelligence, en les définissant.

Envisagée de ce point de vue, l'œuvre de philosophe dépasse en portée les limites d'un temps et d'un forme particulière de la civilisation; elle n'est plus un événement localisé dans le passé, un moment unique dans une histoire irréversible; elle est bien plutôt un événement affranchi des conditions du temps et de l'espace, persistant, en quelque sorte, dans un éternel présent. Pour toute pensée qui s'ouvre à la vie philosophique, la méthode de Socrate, l'Idée de Platon, la nature d'Aristote, l'esprit pur de Descartes sont aussi jeunes aujourd'hui qu'il y a plusieurs siècles, parce que l'on peut refuser d'entrer dans les voies ouvertes par ces philosophes, mais non pas aller ailleurs qu'ils ne sont allés eux-mêmes, si l'on y entre, ni penser désormais comme si personne n'y était jamais entré. Ainsi, garanties par la nécessité interne des essences que pense la raison, les vérités philosophiques nous apparaissent en définitive comme plus immuables que celles de la science elle-même. Si donc la civilisation n'est pas simplement la forme de vie d'une nation et d'une époque particulières, mais aussi, et surtout, le trésor accumulé des vérités et des valeurs spirituelles communes à l'humanité tout entière, le philosophe n'engendre pas seulement l'ordre dans les pensées, il engendre encore la vérité; ou plutôt, il n'y engendre l'ordre que parce qu'il y engendre la vérité. Ainsi, nulle contradiction interne n'oppose les trois manières d'écrire l'histoire que nous avons d'abord distinguées; elles sembleraient bien plutôt correspondre à trois points de vue complémentaires sur le rôle de la philosophie dans l'histoire, car il est d'abord manifeste qu'elle en résulte, mais aussi qu'elle la crée, et que son effort créateur même est essentiellement un acte intemporel de soumission à la vérité.

THE RÔLE OF PHILOSOPHY IN THE HISTORY OF CIVILIZATION

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VOLUMES have been written about each term of our theme. What *is* civilization? history? philosophy? Yet time passes, and as ambiguities and complexities cannot be eliminated by definition, we can only circumvent them by begging questions. But as to one of the terms at least, namely, philosophy, we shall frankly make what is begged explicit. A statement of the relations of philosophy to the history of civilization will, after all, only expound, in some indirect manner, the view of philosophy to which one is already committed. Unless this fact is faced, we shall not only beg the issue, but we shall deceive ourselves into thinking that we are setting forth the conclusions of an original inquiry, undertaken and executed independently of our own philosophical conceptions.

As for myself, then, the discussion is approached with the antecedent idea that philosophy, like politics, literature, and the plastic arts, is itself a phenomenon of human culture. Its connection with social history, with civilization, is intrinsic. There is current among those who philosophize the conviction that, while past thinkers have reflected in their systems the conditions and perplexities of their own day, present-day philosophy in general and one's own philosophy in particular, is emancipated from the influence of that complex of institutions which forms culture. Bacon, Descartes, Kant, each thought with fervor that he was founding philosophy anew because he was placing it securely upon an exclusive intellectual basis, exclusive, that is, of everything but intellect. The movement of time has revealed the illusion; it exhibits as the work of philosophy the old and ever new undertaking of adjusting that body of traditions which constitute the actual mind of man to scientific tendencies and political aspirations which are novel and incompatible with received authorities. Philosophers are parts of history, caught in its movement; creators perhaps in some measure of its future, but also assuredly creatures of its past.

Those who assert in the abstract definition of philosophy that it deals with eternal truth or reality, untouched by local time and place, are forced to admit that philosophy as a concrete existence is historical, having temporal passage and a diversity of local habitations. Open your histories of philosophies, and find written throughout them the same periods of time and the same geographical distributions which provide the intellectual scheme of histories of politics, industry, or the fine arts. I cannot imagine a history of philosophy which did not partition its material between the Occident and the Orient; which did not find the former falling into ancient, mediaeval, and modern epochs; which in setting forth Greek thought did not specify Asiatic and Italian colonies and Athens. On the other hand, those who express contempt for the enterprise of philosophy as a sterile and monotonous preoccupation with unsolvable or unreal problems, cannot, without convicting themselves of Philistinism, deny that, however it may stand with philosophy as a revelation of eternal truths, it is tremendously significant as a revelation of the predicaments, protests, and aspirations of humanity. ✓

The two views of the history of thought are usually proffered as unreconcilable opposites. According to one, it is the record of the most profound dealings of the reason with ultimate being; according to the other, it is a scene of pretentious claims and ridiculous failures. Nevertheless, there is a point of view from which there is something common to the two notions, and this common denominator is more significant than the oppositions. Meaning is wider in scope as well as more precious in value than is truth, and philosophy is occupied with meaning rather than with truth. Making such a statement is dangerous; it is easily misconceived to signify that truth is of no great importance under any circumstances; while the fact is that truth is so infinitely important when it is important at all, namely, in records of events and descriptions of existences, that we extend its claims to regions where it has no jurisdiction. But even as respects truths, meaning is the wider category; truths are but one class of meanings, namely, those in which a claim to verifiability by their consequences is an intrinsic part of their meaning. Beyond this island of meanings which in their own nature are true or false lies the ocean of meanings to which truth and falsity are irrelevant. We do not inquire whether Greek civilization was true or false, but we are immensely concerned to penetrate its meaning. We may indeed ask for the truth of Shakespeare's Hamlet or Shelley's Skylark, but by truth we now signify something quite different from that of scientific statement and historical record.

In philosophy we are dealing with something comparable to the meaning of Athenian civilization or of drama or a lyric. Significant history is lived in the imagination of man, and philosophy is a further excursion of the imagination into its own prior achievements. All that is distinctive of man, marking him off from the clay he walks upon or the potatoes he eats, occurs in his thought and emotions, in what we have agreed to call consciousness. To know the structure of sticks and stones, an enterprise in which, of course, truth is essential, apart from whatever added control it may yield, marks in the end but an enrichment of consciousness, of the area of meanings. Were significance identical with existence, were values the same as events, idealism would be the only possible philosophy. Thus scientific thought itself is finally but a function of the imagination in enriching life with the significance of things; it is of its peculiar essence that it must also submit to certain tests of application and control.

It is commonplace that physically and existentially man can but make a superficial and transient scratch upon the outermost rind of the world. It has become a cheap intellectual pastime to contrast the infinitesimal pettiness of man with the vastnesses of the stellar universes. Yet all such comparisons are illicit. We cannot compare existence and meaning; they are disparate. The characteristic life of man is itself the meaning of vast stretches of existences, and without it the latter have no value or significance. There is no measure of physical existence and conscious experience because the latter is the only measure there is for the former. The significance of being, though not its existence, is the emotion it stirs, the thought it sustains.

It follows that there is no specifiable difference between philosophy and its rôle in the history of civilization. Discover and define some characteristic, some unique function in civilization, and you have defined philosophy itself. To try to define philosophy in any other way is to search for a will-o'-the-wisp; the conceptions which result are of purely private interpretation for they only exemplify the particular philosophies of their authorship and interpretation. Take the history of philosophy from whatever angle and in whatever cross-section you please, Indian, Chinese, Athenian, the Europe of the twelfth or the twentieth century, and you find a load of traditions proceeding from an immemorial past. You find certain preoccupying interests that appear hypnotic in their rigid hold upon imagination and you also find certain resistances, certain dawning rebellions, in struggle to escape and to express some fresh value of life. The preoccupations may be political and artistic as in Athens; they may be economic and scientific as today. But in any case, there is a certain intellectual work to be done; the dominant interest working throughout the minds of masses of men has to be clarified, a result which can be accomplished only by selection, elimination, reduction, and formulation; it has to be intellectually forced, exaggerated, in order to be focussed, to be, that is, intellectually, in consciousness, since all clear consciousness by its very nature marks a wrenching of something from its subordinate place to confer upon it a centrality which is existentially absurd. Where there is sufficient depth and range of meanings for consciousness to arise at all, there is a function of adjustment, of logical reconciliation of the ruling interest of the period with preoccupations which had a different origin and an irrelevant meaning. Consider, for example, the uneasy, restless effort of Plato to adapt his new mathematical insights and his political aspirations to the traditional habits of Athens; the almost humorously complacent union of Christian supernaturalism in the Middle Ages with the naturalism of pagan Greece; the still fermenting effort of the recent age to unite the new science of nature with inherited classic and mediaeval institutions. The life of all thought is to effect a junction at some point of the new and the old, of deep-sunk customs and unconscious dispositions, brought to the light of attention by some conflict with newly emerging directions of activity. Philosophies which emerge at distinctive periods define the larger patterns of continuity which are woven in effecting the longer enduring junctions of a stubborn past and an insistent future.

Philosophy thus sustains the closest connection with the history of culture, with the succession of changes in civilization. It is fed by the streams of tradition, traced at critical moments to their sources in order that the current may receive a new direction; it is fertilized by the ferment of new inventions in industry, new exploration of the globe, new discoveries in science. But philosophy is not just a passive reflex of civilization that persists through changes, and that changes while persisting. It is itself a change; the patterns formed in this junction of the new and the old are prophecies rather than records; they are policies, attempts to forestall subsequent developments. The intellectual registrations which constitute a philosophy are generative just because they are selecting and eliminating exaggerations. While purporting to say that such and such is and always has been the purport of the record of nature, in effect they proclaim that such and such *should* be the significant value to which mankind should loyally attach itself. Without evidence adduced in its behalf such a statement may seem groundless. But I invite you to examine for yourselves any philosophical idea which has had for any long period a significant career and find therein your own evidence. Take, for example, the Platonic patterns of cosmic design and harmony; the Aristotelian perpetually recurrent ends and grooved potentialities; the Kantian fixed forms of intellectual synthesis; the conception of nature itself as it figured in seventeenth and eighteenth century thought. Discuss them as revelations of eternal truth, and something almost childlike or something beyond possibility enters in; discuss them as selections from the existing culture by which to articulate forces which the author believed should and would dominate the future, and they become preciously significant aspects of human history.

Thus philosophy marks a change of culture. In forming patterns to be conformed to in future thought and action, it is additive and transforming in its rôle in the history of civilization. Man states anything at his peril; once stated, it occupies a place in a new perspective; it attains a permanence which does not belong to its existence; it enters provokingly into wont and use; it points in a troubling way to need of new endeavors. I do not mean that the creative element in the rôle of philosophy is necessarily the dominant one; obviously its formulations have been often chiefly conservative, justificatory of selected elements of traditions and received institutions. But even these preservative systems have had transforming if not exactly a creative effect; they have lent the factors which were selected a power over later human imagination and sentiment which they would otherwise have lacked. And there are other periods, such as those of the seventeenth and eighteenth centuries in Europe, when philosophy is overtly revolutionary in attitude. To themselves, the turn was just from complete error to complete truth; to later generations looking back, the alteration in strictly factual content does not compare with that in desire and tendency of effort.

Of the many objections which may be brought against the conception that philosophy not only *has* a rôle, but that it *is* a specifiable rôle in the development of human culture, there are two misconceptions which I wish to touch upon. What has been said, taken without qualifying additions, might suggest a picture of a dominant system of philosophy at each historic period. In fact there are diverse currents and aspirations in almost every historic epoch; the divergence of philosophic systems instead of being a reproach (as of course it is from the standpoint of philosophy as a revelation of truth) is evidence of sincerity and vitality. If the ruling and the oppressed elements in a population, those who wished to maintain the *status quo* and those concerned to make changes, had, when they became articulate, the same philosophy, one might well be skeptical of its intellectual integrity. The other point is much more important. In making a distinction between meaning and truth and asserting that the latter is but one type of meaning, important under definite conditions, I have expressed the idea as if there might be in the processes of human life meanings which are wholly cut off from the actual course of events. Such is not the intent; meanings are generated and in some degree sustained by existence. Hence they cannot be wholly irrelevant to the world of existence; they all have revelatory office which should be apprehended as correctly as possible. This is true of politics, religion, and art as well as of philosophy. They all tell something of the realm of existence. But in all of them there is an exuberance and fertility of meanings and values in comparison with which correctness of telling is a secondary affair, while in the function termed science the accuracy of telling is the chief matter.

In the historic rôle of philosophy, the scientific factor, the element of correctness, of verifiable applicability, has a place, but it is a negative one. The meanings delivered by confirmed observation, experimentation, and calculation, scientific facts and principles, in other words, serve as tests of the values which tradition transmits and for those which emotion suggests. Whatever is not compatible with them must be eliminated in any sincere philosophizing. This fact confers upon scientific knowledge an incalculably important office in philosophy. But the criterion is negative; the exclusion of the inconsistent is far from being identical with a positive test which demands that only what has been scientifically verifiable supply the entire content of philosophy. It is the difference between imagination that acknowledges responsibility to logical compatibility with demands of ascertained facts, and a complete abdication of all imagination in behalf of a prosy literalism.

Finally, it results from what has been said that the presence and absence of native born philosophies is a severe test of the depth of unconscious tradition and rooted institution among any people, and of the productive force of their culture. For sake of brevity, I may be allowed to take our own case, the case of civilization in the United States. Philosophy, we have been saying, is a conversion of such culture as exists into consciousness, into imagination which is logically coherent and is not incompatible with what is factually known. But this conversion is itself a further movement of civilization itself; it is not something performed upon the body of habits and tendencies from without, that is, miraculously. If American civilization does not eventuate in an imaginative formulation of itself, if it merely re-arranges the figures already named and placed, in playing an inherited European game, that fact is itself the measure of the culture which we have achieved. A deliberate striving for an American Philosophy as such would be only another evidence of the same emptiness and impotency. There is energy and activity among us, enough and to spare. Not an inconsiderable part of the vigor that once went into industrial accomplishment now finds its way into science; our scientific "plant" is coming in its way to rival our industrial plants. Especially in psychology and the social sciences an amount of effort is putting forth which is hardly equalled in the rest of the world. He would be a shameless braggart who claimed that the result is as yet adequate to the activity. What is the matter? It lies, I think, with our lack of imagination in generating leading ideas. Because we are afraid of speculative ideas, we do, and do over and over again, an immense amount of dead, specialized work in the region of "facts." We forget that facts are only data; that is, are only fragmentary, uncompleted meanings, and unless they are rounded out into complete ideas — a work which can only be done by hypotheses, by a free imagination of intellectual possibilities — they are as helpless as are maimed things and as repellent as are needlessly thwarted events.

Please do not imagine that this is a plea in disguise for any particular type of philosophizing. On the contrary, any philosophy which is a sincere outgrowth and expression of our own civilization is better than none, provided it utters the authentic idiom of an enduring and dominating corporate experience. If we are really, for instance, a materialistic people, we are at least materialistic in a new fashion and on a new scale. I should welcome then a consistent materialistic philosophy, if only it were sufficiently bold, and, in spite of any attendant aesthetic repulsiveness, in the degree in which it marked the coming to consciousness of a group of ideas, which formulated a coming to self-consciousness of our civilization and thereby furnished ideas, supplied an intellectual polity, to direct further observations and experiments and to organize their results on a grand scale. As long as we worship science and are afraid of philosophy we shall have no great science, except a lagging and halting continuation of what is thought and said elsewhere. As far as any plea is implicit in what has been said, it is, then, a plea for the casting off of that intellectual timidity which hampers the wings of imagination, a plea for speculative audacity, for more faith in ideas, sloughing off a cowardly reliance upon those partial ideas to which we are wont to give the name of facts.

THE RÔLE OF PHILOSOPHY IN THE HISTORY OF CIVILIZATION

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"A CIVILIZED nation which has no metaphysics is like a temple decked with every kind of ornament, but possessing no holy of holies" (Hegel). Hegel does not mean by "metaphysics" here epistemology or logic, but a definite theory of the universe, a world-view, what Plato would call a synoptic vision of reality, which takes into account not only the movements of matter, but the teleological attitudes of men, and which does justice to every side of human experience. Every civilization implies such a metaphysics, even as it has its art and literature, social and religious life. The philosophy of a particular nation will reflect the general temperament of its people, and will bear special reference to the problems of the age when it was formulated. Each system of thought has its own formulas, its own characteristic applications and phrases, its own way of encountering the new problems which always come up in life and thought. It does not, however, mean that there are no universal interests or any objectivity in truth. Simply because the way in which the problems are proposed and the forms in which the solutions are presented vary, we cannot conclude that truth changes its nature with its temporal course or local setting. Philosophy, as a *study* of reality, is subject to evolution. Our knowledge of reality grows, but it does not necessarily follow that the real itself, as distinct from the actual, is evolving. As we are finding it increasingly difficult to account for cosmic evolution on the principle of mechanical adaption to environment, we will find it equally difficult to explain completely the history of philosophic development on the basis of the temperament of the thinkers and the nature of their immediate surroundings. There is, all through, the pressure of an absolute ideal, the control exercised by the nature of reality.

I agree with Professor Dewey in thinking that philosophy, or our knowledge of reality, is psychologically mediated. The individual thinker is not merely reason, naked and undefiled. His rational character is an element in a complex setting. Any human being is not an abstract entity, a mere mind or mechanism, but a product of history, with his roots in a long racial, social, and ancestral past.

History makes him what he is, and determines his way of approach. The point at which the world presses on him varies with his geographical position and his historical environment. The problems which face a philosopher in China at the present moment are different from those which engage the thinkers in this country. The conditioning forces of geography and history enable us to understand the whole course of thought, Eastern and Western, their accents and emphases, their variations and developments.

Philosophy is not simply a theoretical counterpart of the social and spiritual life of a people, but it has a normative function. From the time of the Upanishads in the East and Plato in the West, it has been the task of philosophers to guide the development of the people by formulating ideals and pointing out which of the experiences are to be regarded as central for human life. Philosophy is not a mere reproduction of the facts of life, but is essentially creative in the sense of transforming life. The philosopher meditates on the deeper problems, and the people at large absorb the results of his inquiry. A civilization is a philosophy concretized.

There are thinkers of the present day who ask us to purge philosophy of all interest in morals and society. It is, however, impossible for a true philosopher to eliminate himself entirely from his surroundings. But he should adopt an attitude of detachment and dispassion. It requires a spacious and sensitive mind to understand the different attitudes of men, their ideals and aspirations, and to guide them to their purpose. If we are to get a comprehensive and synoptic vision, we must step aside for a while, and watch the procession. To be able to transform life, we must transcend life, not merely for the sake of transcending it, but also for the sake of transforming it. Philosophy is first to be contemplated before it is worked out. The recognition of the ideal is the first step, while its slow realization is the work of centuries.

It is not necessary for me to give you any illustrations from history to show how a philosophy has a true organic relation to its environment. Professor Taylor has already done it in a brief way. I may perhaps indicate how a system of philosophy at the present day, if it is to be adequate and alive, should be relevant to our present problems which are in a sense unique. Our main interest as a Congress of Philosophy is not so much academic and antiquarian, as contemporary and creative. I believe that there has been no age in the history of the world so full of interest and anxiety to the thoughtful as is the present one. The determining factor in the present situation of the world is the rôle of science. Modern science is breaking down barriers and is creating common interests. The philosophy of the future is likely to be less provincial in character. The world over we seem to be faced by the same problems. The new mathematics, the new physics, the new psychology are revolutionizing accepted notions of space and time, matter and mind. A rethinking of the problems of the borderland has become urgent.

The advances of science have not only disturbed the peace of the philosophers but have also upset social order and spiritual bases. The world is becoming outwardly uniform, though not yet inwardly united. The shrinkage of space is raising its own problems. The East and the West have become next-door neighbors, but not yet understanding friends. We are anxious for world-unity, but are not prepared for getting rid of the habit of mind which makes for world-discord.

When we turn from international to national concerns, our problems are not less acute. Democracy is passing through a testing time. Fascism in Italy and Bolshevism in Russia are only two examples. The class-conflicts in the economic world point to an unstable social equilibrium. The theory that society is a piece of mechanism which will adjust itself automatically through the operation of economic forces of freedom of contract and competition, is steadily losing ground. The workmen claim higher wages and more leisure, with facilities for education and enlightenment, recreation and relaxation. But they do not know how to make constructive use of their leisure, and are devising expensive ways of killing it.

In domestic relations, the upsetting of conventional standards is causing disturbance. There is a lack of understanding between the older and the younger generations. In the traditional codes men have claimed freedom for themselves and have demanded discipline for women. Often men set at rest all bickerings by referring to the natural superiority of women. But women are coming into their own, and are refusing to be our superiors. They are insisting with great force and, I regret to say, much success on becoming our equals. We seem to be more anxious for equality than for quality. It is not very modern for a man or a woman who is sick of his or her partner to take another, but what is modern is a philosophy in justification of it. We have had wickedness with us from the beginning of human history, but we are giving the old habit a new name, self-expression, or wider life. We are regularizing irregularities.

When we come to personal religion, we see an extraordinary amount of restlessness. The sciences of psychology, sociology, and anthropology are undermining the foundations of orthodox theology in every religion. The varied accounts of religious experience seem to support the view that God is but a shadow of the human mind, a dream of the human heart. The application of the empirical method to religious experience has had unsettling results. Mystics, we were told this morning, are highly suggestible folk, given to externalizing their private fancies. An attitude of atheistic naturalism or humanistic idealism is becoming more popular. The textbooks of the past do not seem to be of much help in solving the problems of the present. No prophet of old, it is asserted, could have anticipated our difficulties, or understood them. Any attempt to reinterpret ancient faith to suit modern needs may show reverence for the past, but not intellectual honesty. Our modern educated young men have no use for religion as trust in God, or communion with the Unseen. We have built up our technique of society, and are trying to live clean lives; and religion has some pragmatic value as an attitude of life making for social peace and betterment. In every religious community we have a large number of people who are avoiding the discomfort of thinking, and growing indifferent to the problems of the higher life. Others there are, who shut their eyes to the facts of science and modern knowledge; and like horses in blinkers, they go by the beaten track. The cultured stand by a vague social idealism but no amount of ethical exhortation can take the place of religion. Many openly avow doctrines of selfishness in morals and anarchism in social life.

On every side of life, personal, social, national, and international, the old ideals have ceased to carry conviction. The old science, the old theology, the old sex code, the old economics, the old political theory, and the old international standards are doomed. We cannot revert to them. The fundamentalist's attitude in all these departments has no future.

The new ideals have not come into being. Here is the chance for philosophy. Are we to drift, waiting for something to turn up? Or shall we undertake the spiritual direction of the community? If philosophy is not to abdicate its function, it has to face the challenge of the present situation, and quickly, too. We are not so much in need of a keen analysis of particular problems as those of essence and existence, sensa and perspectives, or a pragmatic insistence on methodology and on the futility of metaphysics, interesting as they all are, but philosophy in the larger sense of the term, a spiritual view of the universe, broadbased on the results of the sciences and the aspirations of humanity. It is no use reasserting conventional views; for that would be to ignore the inwardness of the present unrest. We have to steer a middle course between orthodox theology and godless naturalism.

It is a welcome sign of the times that science, which has inflicted the wounds, is also trying to heal them up. Some of the greatest philosophers of the present day are scientific metaphysicians. They are not satisfied with the facile solutions of a crude naturalism. It is becoming increasingly evident that a scientific view of the world does not make God superfluous. The passing flux of the world is not like the heaving and hurrying, yet ultimately unprogressive, movement of an agitated sea. The course of life is not a series of accidents, but is an ordered ascent from the fresh beginnings of life up to man, and from the primitive uncivilized man to the more spiritual type. The world is tending towards deification, to use the phrase of Alexander. The subjection of the cosmic process to law, and its tendency to produce higher values suggest a Creative Principle operating throughout the course of nature, bringing about ever new and higher forms of life on the stage prepared for it by the lower. This creative urge, this immanent drive in things, this *nisus* towards increasing diversity and perfection, whatever we may call it, indicates the reality of an ultimate Spirit which in religious terms is called God. Such a view is also in harmony with the religious history of the world. From the primitive savage, kneeling before some supposedly sacred tree or holy stone, thrilled with the thought that somewhere at the back of created matter lies and vibrates a Force, a Power beyond his knowing, into contact with which he must somehow come, down to the great faiths of today, men have understood that God is the reality behind and beyond and within the shifting panorama of nature and history.

The interpretation of this cosmic evolution, whether in terms of emergent or creative evolution, requires us to admit that God's creative activity is not confined to the significant stages in the evolutionary process, but inspires the whole onward march. God does not intervene to create mind or life or spiritual insight, but is working continuously. Creation is not an instantaneous act, but is an eternal process. The immanence of God which follows from this hypothesis is the pledge that evil and error, ugliness and imperfection are not ultimate. Evil has reference to the distance which good has to traverse. Error is the stage on the pathway to truth. Ugly is only halfway to a thing, in Meredith's phrase.

The human being has much in common with plant life and animal world, but in addition has power to understand his place in the world's scheme and to share in the work of God. He can control his growth, as plants and animals cannot. Pre-human progress *happened*. Human progress can be *willed*. Each of us has a place in the great adventure. We can use the material with which we are supplied to promote our spiritual ideals. We have enough freedom to deal with the given material. Human development is not a mere passive unfolding of which each step is rigorously determined by the preceding, but is a process of active reconstruction, conditioned by the materials furnished by experience. Until the different individuals realize the purposes with which they are charged, the world-process is unfinished.

Some such view, it seems to me, will help to clear up our present confusion. Religion will not be a mere sanction for the rules of conduct. It is a vision of reality, superior to the historical process. In religious life we endeavor to gain a foothold in the world of eternal values from which to dominate and transmute the life of time. Religion is not merely social service and vague humanitarianism, but confidence in the supremacy of a spiritual reality which gives us strength, and faith in the hour of need that, though the waves on the shore may be broken, the ocean conquers nevertheless. It is not only a life transforming, but a life transcending. The world is suffering, not for lack of light, but for lack of power. We have a high moral tone, but not much moral fervor. We speak of brotherhood, but with little real brotherly love. We love humanity in the abstract, but pass it by in the concrete. We love the beggars on the stage, but not at the theater-door nor even at the temple-door. The dynamic energy to make us live up to our ideals comes, not from the mind, but from the depths of the soul. Self-discipline is a necessary quality of moral life. If we do not cast out the devil from our nature, we cannot exorcise it from the society which it torments. We cannot be satisfied with social idealism, however divine it may be. We may be doing God's work all the time, but let us keep some free moments for self-examination and communion with the Eternal. Prayers to Deity now and then are not enough, but we should also hold our soul in patience, and wait in silence for the answers to our prayers. Such an attitude is likely to develop a serenity of mind and poise which will not be disturbed by the shocks of circumstance. Endurance and reform and not indignation and destruction should be our ideal. There is no use in being condemnatory towards a sinner. We must stretch out to him the hand of sympathy and fellowship as a pilgrim who has been led astray. Every sinner has a future, even as every saint has had a past. The worst criminal has within him an indestructible potency of regeneration. He can turn over a new leaf, and gain a new start.

If this spiritual attitude controls our life from its apex to its foundation, then it will help to sanctify society itself. The secular and the religious aspects of life are not two independent departments, governed by independent laws, but relative distinctions within a larger whole. We should welcome the world of human appetites as the scaffolding from amid which the life of the spirit must rise. The purpose of the institution of marriage is not mutual satisfaction, but enhancement of personality. There is a great saying in the Upanishads, "Not for the sake of the husband is the husband dear, but the husband is dear for the sake of the spirit. Not for the sake of the wife is the wife dear, but the wife is dear for the sake of the spirit." We are not simply individuals, but members of society, and pursuers of spiritual ideals. Life is not merely a list of opportunities for self-satisfaction, but a set of obligations for realizing spiritual good. If life is to be lived merely from moment to moment, then there will be nothing to live for. Self-realization consists, not in the raw exercise of elemental passions, but in their sublimation. Except in the pages of fiction we do not have two people agreeing with each other in tastes and temper, in ideals and aspirations. No two persons are alike. The differences are the material which have to be worked into a harmonious whole. If the existence of incompatibility be a justification for separation, most of us would be divorced. No! It is a challenge to a strenuous life. Marriage is the beginning of the problem, and has for its end the transformation of one's chance mate into a lifelong comrade. Those who enter married life should be prepared for the exercise of patience and restraint. Women insist on equality; they are welcome to do so. But only let them impose their higher standards of discipline on men, rather than accept the lower standards of freedom which they rightly deprecate, or used to deprecate, in men.

In the economic world coöperation should take the place of competition. We must give up the individualistic view, and look upon society as a system of mutual, though varying, obligations held together by a common ideal. Every kind of function is valuable, so long as it serves the social good. Democracy does not mean equality of endowment or function, but equality of value as human beings. Each man as man has a value which is unique, and a dignity which is inalienable. The workers are certainly entitled to the essential conditions of well-being, but should not forget that what is necessary for well-being is not simply easier circumstances, or more comforts of life and larger opportunities for pleasure, but inner harmony and spiritual poise. The great religious teachers speak to us of a peace which the world can neither give nor take away. Without serenity and poise, restraint and self-control, we are not truly civilized, however great may be our outward accomplishments. A monkey trained to ride a bicycle and smoke a pipe is still a monkey.

In the world of international relations we are to realize that national, racial, religious imperialism does not make for peace. Unless we grow internationally minded, peace will not break out on earth. We cannot get rid of wars and rumors of wars simply by talking of peace and actually preparing for war. When a nation in the height of its power and the plenitude of wealth helps its weak neighbor, even at the sacrifice of its interests, that act will bring peace nearer than all conferences and congresses on peace. We cannot accomplish spiritual ends by mechanical measures.

Our attitude towards races whom we are pleased to call primitive and savage must be one of sympathy. The "primitive" and the "savage" but for the grace of God are ourselves under much less favorable conditions. We should see in the differences of races and nations the means by which humanity should progress through mutual service and enrichment to its complete, full-orbed development.

In the sphere of religion we cannot adopt the dualistic attitude that the plants in my garden are of God, while those in my neighbor's garden are planted by the devil which we should destroy at any cost. It is unfair to God and man to assume that He has entrusted His exclusive revelation to some one prophet, Buddha, Jesus, or Mohammed, expecting all others to borrow from him, or else suffer spiritual destitution.

The present needs make upon philosophy a demand to put forth a constructive theory of life, fair to science and faithful to true religion, a philosophy which would insist on the supremacy of a spiritual reality and the practice of self-discipline and self-sacrificing service. This seems to me to be the rôle of philosophy in the present stage of the history of civilization.

THE MODERN CONCEPTION OF PHILOSOPHY

BENEDETTO CROCE

(*Naples*)

(Translated and read by RAFFAELLO PICCOLI)

TO the students of philosophy who have come together for the Sixth International Congress in the free land of America, from all countries in the world, an Italian colleague, who has been unable to come personally among them, sends his most cordial greetings and allows himself, through the courtesy of a friend, the pleasure of holding a brief conversation with them.

Our conversation shall be very simple and debonair, such as is held in a family on domestic affairs, the antecedents and circumstances of which are intimately known, for the purpose of making them clearer to ourselves and of coming to some practical conclusion.

I believe that, if not all, at least many students of philosophy will be ready to acknowledge, as an actual fact, that there are two conceptions which have become superannuated and almost foreign to the spirit of modern thought, two words which have lost all authority, and now even lend themselves either to suspicion or to derision: the conception of metaphysics, that is, of the research of a reality which should be above and beyond experience; and the conception of a systematic or final philosophy, that is, of the construction of a closed system, which should once for all constrict reality, or the supreme reality, within its bounds.

It is a double negation which, if we look carefully into it, reveals itself as the double aspect of a single one; of the negation of a transcendent world, and, through it, of the conception of philosophy as theology. It is only in so far as we presume to know a transcendent world that we may look for a closed and final system, for truth as an immovable entity in opposition to the historical knowledge of passing facts, and of a world which is constantly either passing or becoming.

It is true that there are minds which are not yet resigned to this disaffection, to this divorce of modern thought from metaphysics and the closed systems; but I believe it to rest on solid foundations, and it would be easy for me to support my personal opinion by appealing to the consensus of the highest minds of modern times, and even to the general tendency and behavior of the whole modern epoch under its most peculiar and distinctive aspects; but an historical demonstration would be entirely out of place when speaking to a learned audience. It is well known that the conception of metaphysics and of the closed system had its origin in antiquity and reached its climax in mediaeval scholasticism; that every philosophical movement in the modern age, from the Renaissance with its appreciation of humanism, to the rationalistic and empiricistic schools of the seventeenth and eighteenth centuries, from the idealogical systems with their historical leanings, to positivism and its naturalistic tendencies, was in one way or another a reaction against it; and finally, that Bruno and Vico, Locke and Hume, Descartes and Kant, Hegel and Comte, though among many waverings and survivals and partial returns, all worked for the general erosion of transcendence. And the physiognomy of modern society, so different from the mediaeval world and so unascetic, is before the eyes of us all. And finally, the concept of tolerance, which modern history has reached through the wars of religion, what does it import, but that truth has loosened its grasp in the depth of our conscience, since tolerance is made possible only by indifference, or at least by the fact that theology has been confined to a place of minor importance? For a counterproof it is enough to recall that the Catholic Church, with its inflexible logic, condemns both modern philosophy and modern life in its Syllabus.

If philosophy does not give us either a knowledge of the transcendent, or the final truth, it is clear that it cannot be anything but experience, as immanent as experience is, and, like experience, subject to perpetual growth and change. From these premises it has been hastily inferred that philosophy has ceased to accomplish any legitimate function, and the bankruptcy of philosophy has become something of a catchword, history and science being regarded as the modern substitutes for philosophy. But the truth of the matter is that the one which is bankrupt, or on the way to bankruptcy, is only transcendent and theological philosophy, and that by ridding itself of all theological implications, philosophy has but asserted its nature more energetically than ever before, and in greater conformity with our times.

The nature of philosophy consists in an inquiry concerning the categories of experience, the ideas or "values," as it is the fashion to call them, or, in other words, the Spirit in its forms and in the distinction and unity of its forms. For this part also it would be possible to prove, by an historical demonstration, that genuine philosophy has never been anything but this, even in antiquity, even in the Middle Ages, not to speak of modern times which have produced the *Discours de la Méthode*, the *Scienza Nuova*, the *Kritik der reinen Vernunft*, and Hegel's logic. It would be possible to prove that the theological and transcendent conception, when it did not constitute the negative element against which philosophy fought and developed its strength, was a mere husk, with which, more or less unconsciously, it protected itself while opening new paths; and that all the acquisitions made by philosophy are recognizable as successive increments of our knowledge of the way in which the Spirit works to produce art and science and practical and moral actions. But I shall leave aside, for the reasons given above, the testimonials which could be drawn from the history of philosophy.

It may be useful, however, to point out that this conception of philosophy does not in the least reëstablish transcendence and the static truth in a new form, by pretending to give a final system of the eternal ideas, or categories, or "values," by which experience is governed. And indeed, if such were its task, philosophy might as well save its labors; when philosophy is presented under this aspect, there is no way of refuting, there is nothing to do but to approve, the smiling sentence, that the conclusions which philosophy reaches laboriously and abstrusely are the same which good sense or common sense already possesses without any philosophy, because the categories which our common speech designate by the words true, good, beautiful, etc., and with which we deal as with intimately known and transparent objects, are actually present in every act and in every word of ours. Categories are categories because they are that which *semper ubique et ab omnibus* is recognized as real and effectual.

This is the reason why I did not say that philosophy discovers and determines categories, but only that its inquiries concern the categories, that is, formulate and solve the ever new problems which are continually placed before our spirit by the development of life and by the necessity of observing and judging facts which are ever new, according to that saying of the poet, that we must constantly earn anew that which we already possess. A mind with a love for rather material comparisons and images might represent the categories as instruments with which we give form to matter and which are deteriorated by use, or show themselves inadequate to the task; and philosophy as the technique which repairs them and makes them efficient once more. And, stretching the comparison, one might add that just as instruments are not instruments, are not real instruments, except in the work for which they are made and in which they wear themselves out, philosophy is not real and concrete except through experience and in experience or, to use a larger term, in history. And this addition to our comparison leads us naturally to the proposition of the unity of philosophy and historical construction, of philosophy and historiography.

I hope that, after this explanation, my definition of philosophy as the abstract moment of historiography, or the methodology of historiography, will not appear as a paradox. The knowledge that interests us truly, and which is the only kind that is of any interest to us, is that of the particular and individual things among which we live, and which we can transform and produce incessantly, since we are not immersed in reality as in an external medium, but we are one thing with reality; those particular and individual things which *are* the universe. It may sometimes appear that we can do without philosophy, or methodology; and to a certain extent this is true, as long as our judgment finds the road clear before itself, or not too crowded with obstacles, as long as the definitions implicit in its terms are vivid with light. But as soon as our judgment, through the complexity of facts, or through the passions by which it is troubled, becomes embarrassed and arrested, and seems to lose its criterion, doubt is born, and, with doubt, the necessity of new distinctions and new definitions, that is, the necessity of philosophizing. It is only by philosophy that historical thought and judgment can be started again on their course. New facts require a new philosophy; but, as the old facts live in the new ones, philosophy is at the same time transient and eternal; never static, however, never vanishing in the direction of phenomenism, philosophy has its existence not as a closed and final system, but as a perpetual chain of systematizations.

The dignity which this conception of philosophy lends to history imports an opposition, but an opposition only to metaphysics and transcendence. It is strange, be it said in passing, that this opposition should have been often misunderstood as an opposition to physical science. The main cause of such misunderstanding is to be looked for perhaps in the persistent dualism, in which so many of us are still entangled, of history and nature, mythologically posited as two metaphysical entities, while they are but two gnosiologically different modes of mental elaboration of the same reality. The one is a purely theoretical mode, the other a theoretical and practical one. But if in science we leave aside all that is mere auxiliary abstraction, and didascalic schematism, we see that science as well as history investigates and thinks out and knows particular and individual facts in their becoming. Science, therefore, is history and not even, rigorously speaking, a history of nature as against a history of man, but a living and spiritual history of the same kind as human history is. Human history, on the other hand, by the use of abstractions, can also be lowered, and has been lowered to nature and to abstract natural history. The historical concepts of evolution, or of creative evolution, of struggle for life, of the survival of the fittest, and such like, which have become part of the sciences of nature, and the consciousness which the theorists of physical science have reached of the abstract and conventional elements and of the exigencies of mental economy which inform scientific thought, tend to show in the clearest fashion that the content of the physical sciences is an historical content. Similarly the development of historical thought tends to draw a sharper and sharper distinction between true history and historical abstractions or schematism, between historiography and sociology.

An analogous answer must be given to another objection, that such a philosophy as we have tried to outline is contrary or at least foreign to religion, and that it is devoid of the sense of mystery. There is no doubt that philosophy is opposed to the transcendent and consequently mythological conception of religion; but since the effectual religiosity of man is, and has never been anything but, a confident effort towards purification and elevation, a striving, through sorrow and joy, towards truth and goodness, this modern and human philosophy admits within itself all the earnest and sincere religion which can be in the world. And since it does not consider reality as a fact but as a continuous doing, a perpetual creation, it does not impose any limit to new forms either of life or of thought. The sacred mystery is after all but this infinite creative power, this divine life of the universe. It may be said that this does not satisfy us entirely and that there is in the heart of man an inextinguishable desire to overcome the conditions of life itself, and to evade from the barriers of thought, and a hope and presentiment of another reality which is not the reality that we produce in our life and in our thought. Thought, however, as such, and therefore philosophy, can well account for this desire, and determine if it truly exists, and what it is, and how it arises, but it can never, even if it obeyed the strongest impulse of humility, transform it into an exigency higher than itself, nor deny, within the circle of thought and reality, thought and reality itself. A world different from our world possesses as its first characteristic this one:

that it should be unknown to our world, because, if it were known, it would not be different, and the hypothesis would fall. And this seems to me to be a perfectly orthodox proposition, since transcendent religion does not appeal to thought but to revelation. Of revelation, however, among philosophers and in a Congress of philosophers, and even among well-bred men who are respectful of other people's feelings, there is no occasion to discuss.

It would be well to discourse, instead, on the importance which philosophy, as an inquiry into categories, ideas, and values, and as a gradually deeper and more vivid consciousness of humanity, may have for the solution of the religious crisis in which modern society is involved; a crisis which has become more severe since the time when, after the youthful audacity of the Renaissance, after the secure but somewhat facile and arid confidence of illuministic rationalism, the romantic era began, which still lasts, with its discordant aspirations, with its idealism and sensualism, with its dreams of beatitude, and its pessimistic despairs. We shall not come out of this crisis except through the strengthening of a new and human religiosity, at least for those who, like myself, consider the restoration of the old religions or the introduction in the European world of the ancient Eastern religions, as a Utopian fantasy.

But I should tax your patience too heavily if I wished to treat such a grave question even in the most cursory fashion. I prefer to close with a problem which is more appropriate to a gathering of students of philosophy, because of a technical or even professional quality. If philosophy cannot be but the philosophy of historical experience, if metaphysics and the superhistorical systems and the innumerable problems and positions of problems which are consequent upon them, are intimately dead, is it possible that the type of the modern student of philosophy should remain the same that developed itself in the mediaeval schools, and was later transplanted in the modern universities? The type of the "pure philosopher," who deals with the "eternal problems," and strives for the interpretation of the enigma of reality, and sometimes imagines that he has resolved it, and sometimes confesses his own defeat or, being a man of good will, believes that he has brought his own contribution towards that much sighed for solution which one day somebody else shall discover, this type is clearly a derivation from the theologian of the mediaeval schools. The consciousness of the unity, and of the active interchange, of philosophy and experience, of methodology and history, postulates the necessity of a new type of student of philosophy, who should take part in the investigations of history and of science, and in the work and life of his own times, both from a political and a moral standpoint, if not always through a directly practical action, at least through his observation and his passion: the student of philosophy, who, in order to be true to his vocation, must not be a pure philosopher, but practice, as all other men do, some profession, and above all (let us remember it, since there is a kind of philosopher who is willing to forget it) the profession of man.

Discussion of the papers in the General Session of Division D was led by L. Lévy-Bruhl (Sorbonne).

II. SECTIONS OF DIVISION D

SECTION 1

Time: Tuesday, September 14, 9.30 A.M.
Place: Smith Hall Common Room
Subject: Ancient Philosophy. The Socratic and Platonic Elements in the Doctrine of Plato's Dialogues
Chairmen: G. S. Brett, Toronto
Paul Elmer More, Princeton

The first paper in Division D, Section 1, was to have been read by John Burnet (Edinburgh), but sudden illness made Professor Burnet's presence at the Congress impossible. In Professor Burnet's absence, W. D. Ross (Oxford) spoke briefly, summarizing Professor Burnet's views on the Socratic and Platonic elements in the doctrine of Plato's dialogues.

ON A RECENT HYPOTHESIS CONCERNING THE PLATONIC SOCRATES

R. C. Lodge
(*Manitoba*)

THE object of the present paper is to ask certain questions of those who maintain that the Platonic presentations of the philosophical opinions of Socrates are objective and historically accurate accounts.[1]

I

Plato-students usually distinguish (a) early, (b) middle, and (c) later Platonism, as (a) dialogues of search, (b) mature philosophy, and (c) a new attitude towards science and life, influenced by empirical facts rather than by ideal valuations. It is held that these three phases correspond to Plato's youth, maturity, and old age, respectively,[2] and represent developments and transitions of great philosophical importance.

Let us assume this distinction as sound, and ask what consequences it involves for the hypothesis under examination.[3] If we find, in the developing Plato, a developing characterization of

"Socrates" as (a) conducting isolated, unsystematic researches leading to negative results, in the field of conduct, (b) developing a complete philosophy resting upon a systematic logic and metaphysic, and (c) conducting researches into method, with especial reference to science and empirical facts, — the "method of concomitant variations" would lead us to infer that the Platonic characterizations of Socratic thought are colored by Plato's own development.[4] We do, in fact, find this parallelism, and thus tend, so far, to concur in the usual view of (a) as Socraticism, (b) as Platonically systematized Socraticism,[5] and (c) as trans-Socratic Platonism.

Again, if we take all Plato's characterizations as historical, what are we to think of a "Socrates" to whom logically diverse phases are, in different contexts, ascribed without qualification? In the first place, we have a series of statements which relate "Socrates" to Eleaticism. We are informed that "as a very young man" he proved unable to defend the ideal theory (of middle Platonism), of which he is regarded as the founder,[6] against the Eleatic criticisms which usher in the period of later Platonism. We are further informed that, in later life, he refers frequently, with the deepest respect, to the great influence upon his thought of the Eleatic dialectic.[7] From such statements we should infer that Socrates had invented middle Platonism and later, after profound reflection in youth and middle life upon the Eleatic criticisms, had passed over, in middle life, to a position analogous to the methodological and empirical portions of later Platonism. It would not occur to us that there might be an unsystematic period of inquiry corresponding to early Platonism.

But in other contexts we find this same "Socrates," as a very old man, maintaining in a court of law that he regards himself as dedicated to the divinely inspired mission of *early* Platonism, and that he proposes to act as a convinced *early* Platonist to the day of his death.[8] The "dialogues of search" represent him as carrying on this work in his middle and later years, up to the time of this lawsuit. The "Socrates" of these dialogues is unsystematic and logically somewhat naïve, and does not suggest much philosophical kinship with the systematic and logically sophisticated "Socrates" of the *Philebus*.[9]

Again, the "Socrates" of the constructive dialogues is rather sharply distinguished from the inspired missionary of early Platonism, and also from the scientifically-minded logician of later Platonism. The transitions from gadfly negativity to the systematic positive philosophy are so sharp, that they are either presented as reports of other persons' views, or, if expounded by "Socrates," are introduced with what amounts frequently to a direct apology.[10] The sharpness of these transitions has always been felt by commentators, but the constructive portion of middle Platonism really proceeds by shifting the emphasis from the ethical content of the concepts discussed to the formal assumptions which are, perhaps, genuinely implicit in the "Socratic method" of early Platonism. However, the return to the cave, which applies the logically developed principle of "the good"[11] to all kinds of problems, including, e.g., the place of science in education,[12] seems so systematic as to place the "Socrates" of the *Republic* and *Phaedrus* in a very different world from the missionary of the Lyceum.

But when we compare this constructive "Socrates" with the "Socrates" of the Eleatic dialogues, we are especially inpressed by their philosophical diversity. Could any thinker, at one and the same time of his life, be both a naïve middle Platonist and a self-conscious, logically sophisticated critic of middle Platonism? It seems incredible that the same "Socrates" who in his youth and mature age (*Parm.*, *Phileb.*) comes under the spell of Eleaticism and emerges as a de-transcendentalized Eleatic, should be able, at the same time, to expound the naïve transcendentalism of the *Republic* and *Phaedrus*, and, at a later period of his life, to develop the still more naïve transcendentalism of the *Phaedo*.[13]

The only natural conclusion from this evidence is that no human being could think as this character is represented as thinking, and that the Platonic "Socrates" is, at least in some of the dialogues in which he is the leader, a literary mask, a *dramatis persona*, by means of which the author expresses thoughts which he himself, at least so far, holds at the time.[14] If the distinction between early, middle, and later positions in the body of writings which have come down to us as Platonic is in any fundamental sense sound, it is difficult to see how any other conclusion is even remotely probable.

II

There remains a further method of testing the hypothesis of the substantial identity of the Platonic with the historical Socrates, namely, to compare the content of admittedly non-Socratic Platonism with the content of what, according to the hypothesis, is non-Platonic Socraticism.[15] Let us select, for examination, the attitude towards science (astronomical physics). It is beyond doubt that Socrates, after a period culminating in the study of Anaxagoras's book, gave up physical inquiries and devoted himself to ethical studies, culminating in his "mission."[16] It is further beyond doubt that Plato, in his later years, studied astronomy, and developed, in the *Timaeus*, a fairly complete theory to which his "Socrates" listens without criticism or active participation. The astronomy of the *Timaeus* is thus un-Socratic and specifically Pythagorean in detail, though Platonic in principle.[17] We propose to restate briefly the essentials of this non-Socratic science, and then to compare them with the dream of what science might be, which is expounded by the *Phaedo* "Socrates."

1. Being, as distinct from becoming, is the realm of ideal patterns produced by the principle of the limit, applied to the otherwise unlimited in such a way as to reduce the maximal meaning-values of this unlimited to a unified form which the mind can grasp.[18] E.g., assume mathematical extension as a given infinite. We understand two-dimensional extension so far as we reduce spatial meaning-values to unified or closed figures which the mind can grasp. Rectilinear closed figures satisfy the condition of concentrating spatial meaning-values, and, so far as they are regular, they satisfy the condition of intelligibility. The triangle is the simplest such figure, and is thus the ultimate unit out of which all surface-figures admitted by Plato, whether as simple planes or as the terminations of solids, are constructed.[19] Similarly, motion is intelligible in terms of the circle, for this figure, in virtue of the continuity of its circumference, concentrates the meaning-values of infinite motion, and its regularity satisfies the condition of intelligibility. Triangularity and circularity are thus ideal patterns which represent the unifying principle of mind applying the limit to the otherwise unlimited or infinite extension and motion, respectively.[20]

Pure theoretical science proceeds by constructing mathematical solids, thought of as completely enclosed and compressed[21] within a spherical space revolving upon its axis, and works out (a) the mathematical ratios between the different types of organization into regular solids in respect of content, of superficial area, and of resistance to pressure, and (b) the various modifications of circular motion which arise within a spherical space occupied by solids differing in definite ways in respect of size, shape, and internal coherence.[22] All such knowledge is purely formal, i.e., is confined to the world of being, and in particular to the ideal principles of triangularity and circularity, i.e., the unifying principle of the idea, as applied to intelligible space and intelligible motion.

2. The world of becoming is a physical image of this theoretical cosmos. The spherical space which encloses the physical universe is an image of the mathematical sphere, and the physical motions of the universe, of the planets, and of other, smaller physical spheres, are images of the pure theoretical motions.[23] For example, the elements of fire, water, air, and earth are images of the tetrahedrons, octahedrons, ikosahedrons, and cubes of pure theoretical science, and the transformation of water into steam under the influence of fire, or into ice when all warmth is extracted from the water, are physical images of the action of tetrahedrons in relation to octahedrons and ikosahedrons, in proportions analogous to the calculated proportions of ideal transformations under standardized pressure-conditions.[24] I.e., the image-cosmos is understood as a texture of approximately regular solids interacting in virtue of an all-comprehending circular motion, but with the additional feature of sense-perceivability, which is accepted and appreciated as a part of life, but is not quite grasped by the mind. And further: a sensuous image never exhibits an entirely pure case of the intelligible laws, but always falls incalculably short of our intellectual expectations.[25] Because of this gap, the applications of pure theoretical deductions to empirical experience, in spite of their being grounded in reason, can never become more than a secondary occupation for the philosopher, learned but trifling speculations suitable to amuse his hours of leisure.[26]

This is all narrated to "Socrates" as to one incapable of originating or even criticizing such inquiries, but with a certain general interest in seeing what the human mind can do in a field of investigation in which he is not at home. How does this (Platonic) attitude compare with the attitude towards science ascribed to "Socrates" in the *Phaedo?*

The *Phaedo* passage falls into two parts. (a) As a young man, "Socrates" desired to understand problems of change, both in the phenomenal and in the conceptual realm, but eventually gave up the task, and retained the position of "Socratic ignorance" to the day of his death, though with "some confused notion of a new method."[27] (b) This "notion" — inspired by Anaxagoras's phrase about mind being the disposer of all things — is as follows: — Mind, as such, arranges details so as to realize their maximal value in relation to the whole. The universe is thus a systematic totality, whose detailed arrangements are calculated to realize the greatest conceivable quantity and quality of value. "Socrates" then distinguishes the world of ideas (being) which are perfect expressions of this principle and are thus perfectly apprehensible by mind, from the world of sense-phenomena (becoming), which exist only so far as they participate in intelligible ideas. Detailed explanation of phenomenal changes follows this method: — We pass from the phenomenon itself, which can be experienced but not fully understood by mind, to the ideas in which it participates, and understand these in relation to their principle, the principle of the best. E.g., the power in sense-perceivable fire to melt snow or wax, or to warm the hands, is to be understood in terms of the ideal principles of heat and cold, and these are to be understood in relation to other ideas and eventually in relation to the systematic arrangement of all such ideas in a cosmos so ordered as to realize the greatest possible quantity and quality of value.

For one in a state of "Socratic ignorance" about science, such an attitude is astonishing. A little reflection shows that this attitude coincides with the attitude in the *Republic*, for the "principle of the best" is identical with the "idea of good," and indeed coincides with the "idea of the best" in the *Timaeus*.[28] A "Socrates" who really understands that the physical universe is to be apprehended as a systematic totality so arranged as to realize maximal value, and that all detailed phenomenal changes are to be understood in relation to the ideal principles exemplified in such an ideal totality, should have no difficulty in entirely understanding a "Timaeus" who teaches that the ultimate principle is the realization of value,[29] and that detailed phenomenal changes are to be regarded as sensuous images of the systematic totality of ideal patterns. The theoretical position of "Timaeus" is, in fact, identical in principle with the position outlined by "Socrates" in the *Phaedo*, though "Timaeus" is more at home in the details of his ideal cosmos, and makes a larger number of (somewhat hesitating) references to detailed sensuous analogies.

What are we to deduce from this about the historical Socrates? If we regard the constructive attitude towards science exemplified in the *Phaedo* and *Republic* as historically exact, it is incredible that such a "Socrates" should find it necessary to remain a passive listener in the *Timaeus*, in the position of one not at home in the discussion, either in principle or in detail.[30] If, on the other hand, we accept the picture of Socrates presented in the *Timaeus*, then the "Socrates" does not understand science at all, and we should be inclined to treat the earlier part of the *Phaedo* passage as accurate, but the later part as Platonic idealization, a dialectical development of meanings possibly implicit in the Socratic position, but not worked out by the historical Socrates. This inclination is supported by the fact that the constructive scientific portions of the *Phaedo* and *Republic* are sometimes prefaced by statements that such constructions represent "nothing new, but what Socrates has always been repeating everywhere."[31] It is clear from the context, however, that the hearers need to have these deductions particularly explained to them, and find them anything but old and familiar material, so that we should naturally regard such deductions as Platonic conclusions, connected with Socratic premises, but going beyond Socrates's own deductions.[32]

Let us further compare the attitude towards political science in the *Laws*, where Socrates is absent, with the position in earlier Dialogues, up to the *Republic*. The position in the *Laws* is as follows:

1. The motivating principle is always the ideal of realizing the greatest quantity and quality of value which can be realized with the material at the disposal of the political scientist. The "model city" of 5040 families is so planned that each holder of a citizenship shall develop to the utmost his physical, moral, and religious capacities in the service of the unified spiritual life of the whole city, and shall regard himself, in all his words and works, as a member of the city of God, coöperating with Him in the realization of the ideal plan in which there is a definite place for every good citizen.[33] The economic motive and self-seeking tendencies are to be restrained by education and by legal restrictions which will keep them in their proper place, and every aspect of human life is considered and is given its appropriate place within the ideal totality which is the city of God.[34] 2. Plato's thought moves wholly within a circle of "ideas" and does not descend into the field of particulars. The model city is an organized group of citizenships, consisting of farmerships, priestships, magistracies, etc., much as a university may be thought of as an organization consisting of a presidency, deanships, professorships, fellowships, and scholarships, in relative independence of the individuals who may, from time to time, hold these positions. 3. Between the ideal entities out of which the model city is composed, and the characters of actual flesh-and-blood men and women, Plato recognizes a certain gap, which makes his ideals not entirely realizable in detail, especially in connection with his proposed regulation of business and sex relations, so that actual social life can never be more than an imperfect image or copy of ideal social relations.[35]

This position taken towards political science is, in principle, identical with the position taken towards natural science. In both, the ideas of good, as an ideal totality of value, is the supreme principle;[36] in both, the thought moves wholly within a circle of ideal principles, and the problem is to arrange these ideas within a single system so as to realize the greatest possible quantity and quality of value;[37] and finally, in both a certain gap is recognized between the ideal and the sense-perceivable actualities of experience, a gap which makes empirical applications precarious.[38] The "Socrates" who sits back passively in the *Timaeus* is the same "Socrates" who is a passive listener in the *Politicus*, and the Pythagorean or Eleatic Stranger who takes the lead in those dialogues, expounds much the same theories in the character of the Athenian Stranger in the *Laws*, from which "Socrates" is absent.[39] It is therefore to be presumed (if the Platonic characterization of Socrates is historically accurate) that the political science of these later dialogues, no less than the natural science, is regarded as going beyond what the historical Socrates could criticize or even effectively understand. And yet, it is obvious that the "Socrates" who conducts the discussions of the ideal community in the *Republic* is sufficiently acquainted with the idea of good, and with the ideal city whose pattern is laid up in heaven, and recognizes a similar gap between ideal patterns and sense-perceivable actualities. In fact, the "Socrates" of the *Republic* expounds a political science which is substantially the same as the political science of the *Politicus* and *Laws*, in which this character is either silent or absent.[40] If the *Republic* "Socrates" is historically accurate, it is incredible that the *Politicus* "Socrates" should be an objectively accurate representation. For one and the same person cannot, during the period of philosophical maturity, be both competent and incompetent to discuss helpfully the same subject. On the other hand, if the *Politicus* "Socrates" is authentic, and the absence of "Socrates" from the *Laws* is to be interpreted as indicating that the constructive discussions of that dialogue are Platonic, i.e., go beyond historical Socraticism, we must conclude that the *Republic* "Socrates" is at least a highly Platonically colored creation.[41]

The natural conclusion, here as in the analogous case of physical science, is that the systematic constructiveness of the *Republic*, no less than that of the *Politicus* and *Laws*, represents a Platonic development, implicit possibly in the Lyceum teachings of the historical Socrates, but not worked out explicitly by that teacher.

III

It remains to consider briefly the *Theaetetus* picture of Socrates as essentially a mental midwife, who has no philosophy of his own, but has sufficient grasp of the demands of scientific method to make an ideal teacher.[42] If this is historically authentic, is it logically compatible with the constructiveness which characterizes the *Phaedo*, *Republic*, *Phaedrus*, and *Philebus?* The answer must surely be in the negative, except, to some extent, in so far as these dialogues deal with questions of method. This negative answer is strengthened by a glance at the development of the minor "Socratic Schools." Not one of these presents the systematic development which we find in middle and later Platonism.[43] But if Socrates had taught a systematic philosophy of his own (such as middle Platonism), we should certainly expect to find evidence of it in these other Socratic schools (as we find traces of middle Platonism in later schools).[44] The natural inference is that Socrates was mainly a great teacher. The fact that his minor followers philosophized at all was due, perhaps largely, to his inspiration; but the positive and systematic elements in their philosophies should be interpreted as derived from other, extra-Socratic sources.[45] We should, of course, admit that the interest in ethics and in method, which we find in the Platonic Dialogues, is due, perhaps largely, to Socratic influence. But the systematic development of the ideal theory in the *Phaedo* and *Republic*, not to mention the *Theaetetus*, *Sophistes*, and *Philebus*, and its application, not only to political, but also to physical science, is surely due to Plato, though possibly it is not inconsistent with the dialectical presuppositions of certain aspects of Socrates's teaching.[46]

IV

It is only fair that we should put together what appears to be Professor Burnet's real opinion, and consider how far it constitutes a satisfactory answer to these difficulties. His reply would presumably be as follows:—

If you will dissociate my statements from those of Professor Taylor, you will find that I have never maintained without qualification that the "Socrates" of the Platonic Dialogues is in all respects historical. I have always admitted that much is due to the artistic genius of Plato, and have insisted that, as Plato grows older and develops a philosophy of his own, a philosophy which is non-Socratic, traces of this begin to creep in and tinge statements attributed to "Socrates." This is true in the constructive dialogues and especially in the later dialogues. The "Socrates" of the *Philebus*, for example, is Plato himself, discussing certain academic views with younger members of the Academy, and the "Socrates" of the *Theaetetus* has certain non-Socratic touches of thought. You may perhaps think that this does not differ much from the traditional view. There is, however, an important difference. Most Plato-students take the Platonic writings as a whole, and, while distinguishing three phases — a distinction partly supported by my contentions — really do not believe that we can distinguish what is Socratic and what is Platonic. I have tried to distinguish definitely, and, by confining the term "Platonism" to Plato's academic lectures, which are only partially represented in the dialogues, I have (1) separated Platonism entirely from the "ideal theory" and almost entirely from the "idea of good," and have (2) brought it into definite relation to the statements of Aristotle and to the mathematical standpoint of the historical development of Platonism.

V

According to this "reply," we are invited to choose between (a) treating the Dialogues as a whole, and (b) dividing them into two sections, of which the first part is to be called Philosophy of Socrates, while only the later dialogues are to be known as "Platonism." Professor Burnet asks us to believe that, down to the end of the *Republic*, Plato confined himself to writing up Socraticism in the form of (slightly idealized) conversations which might actually have taken place, and in certain cases (*Phaedo*) did take place, and then, after a period of criticism (*Parmenides*), proceeded to expound his "own" views (the views taught systematically in the Academy) in relation to other schools. The traditional alternative is to regard all the Dialogues as Platonic, and all the characters (Socrates, Alcibiades, Phaedrus, etc.) as *dramatis personae*, Platonically colored presentations of certain types, with an objective reference, of course, but with the trail of Platonism over them all. The traditional view believes that, in the first period, Plato's artistic and philosophic genius represents actual persons carrying on a discussion which may, to a limited extent, have taken place (*Protagoras*, etc.). In the constructive dialogues it is believed that Plato's genius constructed philosophical dramas which, while still attached to actual traits of actual personalities, go far beyond any actual conversation, and indeed beyond any conversation which might conceivably have taken place. In the later dialogues, the usual position is akin to Professor Burnet's, except that their distinction from "Socratic" elements is not so sharply emphasized. These opposed views differ mainly in the degree in which they recognize sharp distinctions between "Socratic" and "Platonic" elements. The choice is between believing that such distinctions should be established, and believing that the Dialogues should be taken as a whole, and that the artistic and philosophic genius of Plato makes such distinctions (if possible) of minor significance.

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NOTES

[1] B. 2 : 173, 174, 177, 178, 212; 4 : 671; 6 : 63, and notes on *Apology* 23 e 5, 29 d 8, 36 c 7, 40 c 7. T. 1 : ix. Negatively, it is maintained that the "ideal theory" is not Platonic, but Socratic and Pythagorean (B. 1 : 354–55, 356 n. 2; 2 : 155, 156; 3 : xliii–iv, xlvi; 6 : nn. *Euth.*, 5 d 3, 6, 7 b 6, d 1, 9 d 1. T. 1: 110, 128, 243, ff.; 2 : 40).

[2] B. thinks it "self-evident" that no Dialogues were composed during Socrates's lifetime (in opposition to Wilamowitz, B. 6 : 4, and note on *Ap.* 39 b 8). In spite of traces, in the *Phaedo* and *Republic*, of a "critical attitude" towards the constructive theories of those Dialogues, which is certainly Platonic, and *may* be Socratic, B. believes that Plato's philosophical maturity does not begin till after the *Republic* was finished. Platonic maturity is exemplified especially in the *Philebus* (B. 2 : 161, 165, 214, 223–24, 232, 237, 253–55, 283, 325; 3 : note on 107 b 6).

[3] Cf. C. G. Field, *Socrates & Plato* . . ., pp. 31, ff. B. maintains that, up to the end of the *Republic*, Plato throws himself objectively into the position of a Socrates, an Alcibiades, an Aristophanes, etc., and only in later Dialogues expounds *Platonism* (= *the doctrines taught in the Academy*), in the person of "Parmenides," a "Stranger," and once (*Philebus*) in the person of "Socrates" (B. 2 : 155, 165, 173, 212, 236–7, 274, 283, 313, 325).

[4] B. believes Platonism and Socraticism are so distinct that the one could not color the other (B. 2 : 165, 178, 233, 283, 323, 332, 335–6; 3 : x; 5 : 741 b; 6 : 63. Cf. T. 1 : 56–7).

[5] Or Socratically influenced Platonism. B. regards the doctrines of the *Republic* as "substantially Socratic," but recognizes traces of the influence of Plato's interest in his Academy at certain points (B. 2 : 172–3, 174, 213, 232). B. regards phase (c) as trans-Socratic Platonism, and the *Philebus* as peculiarly Platonic, in spite of "Socrates" leading the discussion (B. 2 : 237, 274, 325).

[6] *Parm.*, 127 c, 130, cf. B. 2 : 155, 255; 3 : xi, n. 2. Elsewhere B. differs from Plato, and declines to regard Socrates as the founder (B. 1 : 355; 3 : xliii; cf. T. 1 : 128, 181, 244, 246).

[7] *Theaet.*, 183 e, *Soph.*, 217 c. Cf. the *Philebus* "Socrates," who uses "division" as though he were identical with the Eleatic Stranger. B. thinks the Zenonian dialectic induced Socrates to apply to ethical matters the method applied by Z. to geometry and *metretike* (B. 4 : 669, 671 a; 6 : notes on *Euth.*, 5 d 3, 7 b 6, c 7, d 1, 9 d 1).

[8] *Apol.*, 17 d, cf. 38 c, 23 b 4 f., 28 e 4 f., 30 a 5 f., e 6 f. B. regards these passages as "ironical," and insists that Socrates had a positive doctrine (*epimeleia psyches*). B. 4 : 670 b; 6 : notes on *Euth.*, 13 e 10, *Apol.*, 20 d 8, 29 e 1; 7 : 10–11, 25, 27.

[9] Cf. Jowett: *Intro.* to *Philebus, ad init.*, Wilamowitz: *Platon* ^{2} : 628, 629.

[10] *Rep.*, 368 b–c, 506 b, f., 509 c, cf. 449 b, f., 472 a–b, d, f. B. argues that many of these positions are implied in earlier dialogues and are thus reasonably regarded as Socratic (B. 2 : 172–3, 174, 177, 213; 6 : notes on *Apol.*, 23 e 5, 36 c 7, 40 c 7).

[11] B. regards the "idea of good" as, in the main, Socratic and un-Platonic. The central concept for Plato is, not "the good," but God as a self-moving soul (B. 2 : 169, 335–7).

[12] B. regards this as trans-Socratic Platonism, though not representing Plato's final word (B. 2 : 213, 223–4).

[13] B. agrees that it is the ideal theory (*Rep.*, *Phaedo*) which is refuted by "Parmenides" (B. 2 : 155, 253–55; 3 : xi, n. 2).

[14] I.e., like "Aristophanes," "Prodicus," etc., "Socrates" is a mixture of *Dichtung* and *Wahrheit*. B. admits that *some* of the views expounded by "Socrates" are specifically Platonic (education in *Rep.*, vii, "categories" in *Theaet.*, 185 d–e, and most of *Phileb.*), and that other views *may* be specifically Platonic (the *Phaedrus* view of the soul as self-moving, and the *Phaedo* and *Republic* suggestions of a critical attitude towards the ideal theory). The difference between B. and others is thus as to how much is *Dichtung*, and how much is *Wahrheit*. The difference seems greater because others use "Platonic" to cover all the Dialogues, including, e.g., the term "Socratic," while B. means by "Platonic": "taught orally in the Academy and occasionally finding partial expression in the later Dialogues."

[15] I.e., the content of dialogues later than *Rep.*, esp. if "Socrates" is silent or absent, with the content of earlier dialogues. B. thinks Plato had "no philosophy of his own" till after the *Republic*.

[16] B. 2 : 124; 3 : note on 96 b 3; 4 : 669; 6 : notes on *Euth.*, 3 b 2, *Apol.*, 18 b 5, 19 c 4, 21 a 5, 29 e 1, *Crit.*, 47 d 4; 7 : 11, 13, 25, 27. T. 1 : 160–1, 244; 2 : 23–4. For a different interpretation of the Xenophon evidence, see E. Frank, *Plato u. d. s.-g. Pythagoreer*, 202.

[17] *Laws*, 821 e (with Ritter's note on 822 a) is explicit and indicates development beyond the *Timaeus* position. For attempted explanation of the silence as well as scientific competence of the *Timaeus* "Socrates," cf. B. 3 : xxxvi, xxxviii, n. 1; 6 : note on *Apol.*, 19 c 4, d 5, and T. 1 : *Phrontisterion* essay; 2 : 23–4, 28–9.

[18] *Phileb.*, 26 b, f., cf. Natorp, *Platos Ideenlehre:* 340 ff. The details of what follows are disputable, but the main point, viz., the relation of the *Timaeus* attitude towards science to the *Phaedo* attitude, is not affected by disputes *re* interpretation of details.

[19] *Tim.*, 53 c, f.

[20] *Phaedr.*, 245 c, f., *Tim.*, 34 a–b, *Laws*, 893 c, ff., 897 c, f.

[21] *Tim.*, 58, cf. 32 c, f., 53 d, ff.

[22] *Tim.*, 54, ff., 58, ff., 60 e, f.

[23] *Tim.*, 29 b, 30 c, f., 37 c, f., 39 d, f., 48 e, f., 50 b, f., 52 b, f., cf. *Rep.*, 529 c, f., with Adam's notes, and E. Frank, *op. cit.*, 161, ff. Most writers *identify* this physical space with the mathematical extension. B. 2 : 344 goes further.

[24] *Tim.*, 54 c, f., 55 d, ff., 58 a–b, 59 e, 61 d, f.

[25] *Tim.*, 51 d, f., 52 c, cf. *Rep.*, 473 a, 508 e, f., 516 b, ff., *Parm.*, 133 b, f., *Phaedo*, 98, ff. B. 2 : 349 believes that "the gulf has been bridged."

[26] *Tim.*, 59 c–d, cf. *Phaedo*, 99 d, f., *Rep.*, 475 c, ff., 529 b–c.

[27] *Phaedo*, 96 a–97 c. What follows is from *Phaedo*, 97 c, ff.

[28] *Phaedo*, 101 d, *Tim.*, 46 c 8, cf. E. Frank, *op. cit.*, 121–2, who regards this as "nicht sokratische, sondern eigentümlich platonische Lehre."

[29] *Tim.*, 29, f., cf. 32 c, f., 53 b, e, f. T. 2 : 29 does not note that the "speculations" of Timaeus are *not* the clever mechanism which had once "charmed" Socrates, but are teleological throughout, and fulfil the postulates which the youthful Socrates, though "charmed," had made in vain. Elsewhere T. regards the *Timaeus* as falling within "the regions of 'Platonism' proper" (T. 1 : 266).

[30] The "Socrates" who can demand the grounding of all scientific assumptions in a single science based on the idea of good has surely nothing to learn from "Timaeus" *re* ultimate principles, and the *Timaeus* treatment of "secondary and co-operative causes" should have been entirely to the mind of the *Phaedo* (99 a, f.) "Socrates." B. regards *Rep.* VI *ad fin.* as partly non-Socratic, and VII as specifically Platonic. B. and T. both regard the *Timaeus* as going beyond the views of the historical Socrates.

[31] E.g., *Phaedo*, 100 b, *Rep.*, 504 e, f.

[32] Cf. B. 2 : 177, 178, 213; 3 : xxxvii, and note on 107 b 6; 6 : notes on *Euth.*, 13 e 10, *Apol.*, 23 e 5, 36 c 7. B.'s main position, however, is that "to the end of the *Republic*, Plato had no philosophy of his own."

[33] *Laws*, 715 c, ff., 903 b, ff., with Ritter's notes.

[34] For discussion of the evidence, see *Philos. Review*, XXXIII : 37–50, XXXIV: 10–15. Cf. B. 2 : 336, ff., T. 3 : 97, ff.

[35] *Laws*, 739 c–e, 745 a, f., 781 c, 839 d.

[36] *Laws*, 903 b, f., with Ritter's notes, cf. 920 b. The *term* "idea of good" does not occur outside the *Republic;* but the principle of realizing maximal value is obviously at the root of the *Laws* and *Timaeus* no less than in the case of earlier dialogues.

[37] *Tim.*, 27 e, ff., 46 c; *Laws*, 746 b, f., etc.

[38] *Tim.*, 51 d, f., 52 c; *Laws*, 739 c, f., 745 e, f., 781 c, 839 d. Cf. T. 3 : 31–2. B. 2 : 343, 349, interprets differently.

[39] Cf. B. 3 : xxxvi, xliii; and T. 1 : 266; 2 : 23.

[40] Cf. *Rep.*, 402 c–d, 618 a, f.; and *Theaet.*, 175 c, 186 a, whose context B. 2 : 283 regards as specifically Platonic.

[41] B. seems to regard this statement and the following conclusion as partly correct, though not to the extent indicated in the text (B. 2 : 178, 213, 223–4, 232, 236–7; 3 : xxxvi, xliii, note on 197 b 6).

[42] *Theaet.*, 150 b, ff., cf. *Rep.*, 518 d, *Soph.*, 230 b, f., *Gorg.*, 509 a, *Meno*, 82, ff. Cf. H. W. Blunt, *Mind*, 1912 : 444, and B. 7 : 10–11.

[43] B. answers this position (it is H. Maier's, cf. also C. G. Field, *op. cit.:* 14) by saying it would be impossible to account for these men's representing their position as Socratic, unless there was positive doctrine. He finds this to be *epimeleia psyches*, implying the one-man, one-trade view, immortality, and the whole doctrine of the good (*Rep.*) and probably the tripartite theory of the soul (B. 3 : x; 4 : 670 b; 6 : notes on *Ap.*, 20 d 8, 21 a 5, 32 e 5, 29 d 8, e 1, 36 c 7, 40 c 7, *Crit.*, 47 d 4 ; 7 : 13, 25, 27).

[44] B. 7 : 4–5, etc., thinks we do find traces of the *epimeleia psyches* doctrine. Cf. also T. 1 : x.

[45] B. would admit this, in part, just as he insists on the extra-Socratic source of much in later Platonism. But he would stress the evidence of the *epimeleia psyches* doctrine, in all these cases.

[46] B. accepts the Platonic ascription to Socrates of the ideal theory, in its ethical and political applications, but regards the scientific applications (*Rep.*), the categories (*Theaet.*) and *koinonia eidon* (*Soph.*), and the *peras* (*Phileb.*) as specifically Platonic (B. 2 : 173–4, 155, 165, 173–4, 232, 237, 257, 329, 332, 335, ff.).

SUR LE *PHÉDON*

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C'EST, pour une bonne part, de l'étude du *Phédon* qu'est sortie la nouvelle interprétation du personnage de Socrate dans les dialogues de Platon. Par les recherches et les discussions qu'elle a suscitées, la thèse de MM. A. E. Taylor et John Burnet a été féconde. Si je l'ai critiquée dans un article de la *Revue des Études grecques* (1916), ce n'est pas sans l'avoir reconnue, là et ailleurs, très hautement probable sous plusieurs rapports. Mais il est arrivé que, après avoir fait de ce même *Phédon*, en vue de l'édition et de la traduction française que j'en ai données cette année dans la collection Guillaume Budé, l'objet d'une méditation approfondie, j'ai été conduit à prendre à l'égard de cette thèse une position de plus en plus réservée. C'est sur ce point que je voudrais donner quelques explications.

D'après M. Burnet, le *Phédon* est une relation, et une relation digne de foi, établie sans nul doute sur des témoignages dûment contrôlés, de ce qui s'est réellement dit dans le dernier entretien de Socrate avec ses familiers. Non pas certes une relation littérale, car Platon a pu, par un procédé de concentration très légitime, y introduire des éléments empruntés à des conversations antérieures: une relation fidèle cependant, tant pour le fond des idées que pour la conduite de la discussion. La vérité n'a pu en être altérée par les sentiments qui ont poussée inconsciemment Platon à idéaliser la figure de son maître. C'eût été en effet de sa part une faute de goût et un manque de cœur d'utiliser pour l'exposition de ses propres idées le cadre de cette scène tragique, et une telle composition, avec son apparence de récit historique, serait une mystification impie. D'ailleurs Phédon, Simmias, Cébès, plusieurs autres parmi les assistants, sont encore vivants au moment où paraît le dialogue, et Platon n'aurait pas osé prêter à Socrate des propos que celui-ci n'avait pas tenus. C'est bien plûtot dans le détail des circonstances qu'une part peut être faite à l'invention dramatique de l'auteur.

Je ne discuterai pas sur le point de savoir si Platon aurait manqué au bon goût et à la piété en mettant dans la bouche de Socrate ses propres théories. L'important, me semble-t-il, c'est plutôt de se demander s'il n'est probable qu'il s'est considéré comme l'héritier authentique de la pensée de son maître. La réponse affirmative étant supposée, il devait se croire autorisé à prêter à Socrate mourant, sur la mort et sur la destinée de l'âme, des vues qui lui apparaissaient comme un simple prolongement des enseignements qu'il avait reçus. Et il y a des indices qui donnent à croire que c'est ce qu'il a fait.

I. Tout d'abord on peut s'étonner que Socrate ait, en fait, attendu jusqu'à son dernier jour pour traiter avec ses familiers le problème de l'âme. L'examen en est cependant présenté à plusieurs reprises dans le dialogue comme une nouveauté: c'est un sujet sur lequel il ne s'est pas expliqué avant ce jour, qui lui en offre une occasion favorable (61e sq., 63cd, 64a, 70b). Mais comment l'admettre, s'il est vrai que depuis trente-cinq ans Socrate est l'apôtre d'une règle de vie, dont le salut de l'âme est le principal objet? Comment l'admettre, si de plus il est vraiment déjà en possession de la théorie des essences formelles et de la réminiscence? Tout cela se lie en effet de la façon la plus étroite, le *Phédon* en est l'incessante affirmation, au problème de l'âme. Si, en même temps qu'il est un apôtre, Socrate a aussi des préoccupations spéculatives, sa réserve anterieure sur une pareille question est difficilement explicable. Ne serait-ce donc pas la fiction de Platon qui le fait sortir de cette réserve? Et sa façon de nous le suggérer, c'est justement de dire que, jusqu'à son dernier jour, son maître n'en a point parlé.

II. Il y a plus. Le problème de l'âme est, dans le *Phédon*, lié à une doctrine d'ensemble sur la physique; car la conception qu'on se fait de l'âme est la clef du problème de la génération et de la corruption (95e). D'autre part, le dialogue s'achève par un mythe qui, en un sens, est eschatologique, mais qui est aussi, et principalement, physique. Application spécial de la doctrine général: structure de la terre, mers, fleuves, volcans, dans leur distribution et dans leur régime; tout cela ne sert qu'à illustrer et à confirmer une certaine conception des rapports de la Nature avec l'âme. Si pourtant la théorie des Formes est déjà, d'une façon quelconque, chez Socrate, on peut douter que ce soit autrement que comme une réaction contre la Physique en général. Or ici, tout au contraire, la théorie de l'âme apparaît comme le moyen de fonder une physique nouvelle, comme un moyen d'expliquer, soit l'adaptation de la nature sensible aux fins de la pensée et au bien, soit inversement leur antagonisme: d'où toute une théorie de la causalité (98b–100b). Ce que dit le fameux morceau de Socrate, dans sa réponse a Cébès, sur l'évolution de sa pensée, c'est précisément que la théorie des Formes doit être la base d'une physique entièrement différente de l'ancienne. Le *Phédon* prélude donc à des spéculations qui sont tenues pour spécifiquement platoniciennes, celles du *Phèdre* et surtout du *Timée* ou du Xe livre des *Lois*.

III. J'en dirais autant ce passage de la théorie des contraires (103c–104b), où l'on nous explique comment toute Forme, en même temps qu'elle est participée par des sujets, participe elle-même à une essence supérieure de laquelle elle reçoit sa qualification, le Deux par exemple la qualification de pair ou le Trois, celle d'impair. C'est l'anticipation de la doctrine du *Sophiste* sur la communication des Genres. À quoi sert-il d'établir d'autre part (102a–d) une distinction entre les dénominations relatives et les dénominations intrinsèques, sinon à faire comprendre qu'une chose puisse être deux choses, c'est à dire à rendre compte de l'attribution? Que les difficultés relatives au jugement remontent à l'Eléatisme, je n'en disconviens pas. Il n'en est pas moins très probable que leur véritable signification n'est apparue qu'après Socrate. Enfin il n'est pas jusqu'à l'explication des nombres mathématiques et sensibles par des nombres-essences, qui ne soit déjà dans le *Phédon* (101c), avec une esquisse des rapports entre les mathématiques et la Dialectique. Donc, ou bien on reconnaîtra en tout ceci l'indication de vues que Platon élaborera plus tard; ou bien ce n'est pas seulement une bonne moitié de Platon, c'est Platon tout entier qu'il faudra reporter au compte de Socrate.

IV. Mais d'autres indices de la fiction sont, à mon avis, d'une signification plus décisive encore. Je n'allèguerai pas que pour Platon c'est peut-être, comme le pense M. Léon Parmentier, une règle littéraire de ne faire parler que des morts. Si pourtant cette convention est vraiment une loi des dialogues, elle doit en exclure le souci de la vérité historique et fondée sur des témoignages, pour signifier au contraire la pleine liberté de l'invention, dans les limites de la vraisemblance. Du moins y a-t-il en fait dans le *Phédon* un contraste qui mérite de retenir l'attention: parmi tous les familiers qui sont présents, quatre seulement (car les interventions de Criton n'ont pas de caractère philosophique) prennent part à l'entretien, Simmias, Cébès, Phédon et l'anonyme de 103a. D'autre part, entre ceux qui gardent le silence il y a deux philosophes de premier plan, Euclide et Antisthène: est-il vraisemblable que, dans un entretien de pareille portée philosophique, ils n'aient pas eu un mot à dire? Leur silence semble être le pendant de l'absence de deux autres philosophes pareillement notables, Aristippe et Platon lui-même. Par contre, il se trouve que ceux qui prennent à l'entretien une part active sont, non pas même Phédon, lequel n'apporte dans la discussion aucun élément personnel, mais Simmias, Cébès et enfin cet inconnu, dont cependant l'intervention oriente le dialogue vers l'analyse dialectique la plus subtile qu'il renferme. Or, en ce qui concerne Simmias et Cébès, aucun des témoignages anciens que nous possédons sur eux, y compris celui de Xénophon, ne dépasse les données mêmes du *Phédon,* ou l'interprétation de ces données. Ce ne sont pas en effet, bien certainement, les écrits que leur attribue Diogène Laërce qui peuvent constituer pour notre information un complément authentique. Bref, il semble bien que, loin d'être des personnages vivants dont le témoignage aurait pu être invoqué par les lecteurs contemporains, ce soient plutôt des figures de convention, des noms propres étiquetant des théories pour les besoins de la forme dialoguée.

V. Quant à ces théories elles-mêmes, dont une identification historique est d'ailleurs si incertaine, il me semble impossible qu'elles soient, comme le donne à entendre la mise en scène, des objections suscitées *sur l'heure* par un exposé *tout neuf*. Mon sentiment est bien plutôt que ce sont des objections qui se sont produites, peut-être à l'interieur même de l'école, contre une doctrine antérieurement élaborée et qui a été déjà matière d'enseignement. D'une part l'affabulation du *Phédon* veut que toute la théorie de l'âme soit le chant, jusqu'alors inentendu, du cygne qui va mourir. Mais on perçoit après nettement d'autre part l'accent d'un philosophe qui, à l'heure où il écrit, est engagé dans la bataille des idées, qui a par devers lui toute une doctrine où la théories de l'âme a sa place et qui, par de nouvelles preuves ou par une systématisation nouvelle de ses raisons, défend cette partie de sa doctrine contre des théories opposées.

En résumé, le *Phédon* n'est pas, à mon sens, une relation de dernier entretien de Socrate. Ce n'est pas assez d'admettre un arrangement de détail: le *Phédon* est une fiction dans sa substance même, et, s'il contient de la vérité historique, elle est dans les circonstances particulières et de fait. Ce n'est donc pas Socrate qu'il y faut chercher et trouver, c'est Platon. Le *Phédon* est un traité de l'âme, comme il y en a d'autres, analogues, incorporés à la *République,* au *Phèdre,* au *Timée,* au X^e^ livre des *Lois*. Mais ce traité est construit sur le type d'un genre littéraire spécial, le **λόγος σωκρατικός**, c'est donc un mime, c'est à dire une imitation du réel. Ce que Platon fait dire à Socrate, c'est ce que, selon lui, Socrate au moment de mourir aurait pu dire sur l'âme et sur sa destinée, s'il avait donné à sa pensée tout le développement dont elle est

capable et si ce développement avait rencontré les objections auxquelles lui, Platon, s'est heurté. À cette fiction il a donné le cadre le plus propre à rendre sensible la grandeur du sujet traité. Quant à la fiction même, quel motif aurait-il eu de chercher à la dissimuler? C'était la loi reconnue du genre qu'il utilisait pour exprimer sa pensée. Il ne s'agissait dès lors pour lui que de sauvegarder la vraisemblance psychologique général des situations et des caractères. Et l'on ne peut nier que Platon n'y ait réussi d'une manière incomparable.

THE QUESTION OF THE SOCRATIC ELEMENT IN PLATO

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(*Chicago*)

IN the general opinion of scholars, thanks are due to anyone who, by the suggestion of a fresh and stimulating hypothesis, breaks up the tiresome vault of heaven into new forms. I have no wish to challenge this more generous attitude. But I am not a pragmatist, and my matter-of-fact mind can only ask of any such brilliant suggestion: Is it true?

We possess an immense body of text of Plato and Aristotle, the meaning of which it ought to be possible to determine by critical study. I know of no way to measure the results of such enquiry against the vague probabilities that may be deduced from *a priori* presumptions about their moods or intentions, or conjectural reconstructions of their oral teaching or lost writings.

In the question before us, if we may assume absolutely that Aristophanes could not have grossly misrepresented Socrates to an audience that has seen him, or that Plato's piety would not have allowed him to put his own ideas dramatically in his master's mouth, there is nothing further to discuss, and our interpretation of the Platonic dialogues and of the testimony of Aristotle is predetermined by these presumptions. I do not accept either of them. I think them both highly improbable. But neither admits of proof or disproof with the certainty that ought to result from critical examination of Plato's writings. If I argue the question at all, then, it is merely to present what appear to me to be the probabilities, and by way of introduction to the only argument that I take seriously.

Socrates becomes a problem only in reference to speculations that assume more than we can know or prove about him. We can know little of a thinker who has left no writings. Of Socrates we can affirm only the greatness of his personality and the general traits common to the representations of Plato, Xenophon, and Aristotle, virtually our sole authorities. Xenophon and Aristotle are mainly dependent on Plato, and Aristophanes's *Clouds* is an irresponsible caricature. The fancy that Plato must have been a faithful reporter is sufficiently answered already in old Tucker's *Light of Nature:* "When we reflect how apt Plato was to put things in the mouth even of his master Socrates which never were in his head . . . we cannot depend upon the . . . doctrine being older than Plato himself." The Socrates of Plato is an ideal, too good to be true, the mouthpiece of Plato's opinions and the protagonist of his dramatic portrayal of discussion at Athens. Neither the literary practice nor the ethical feeling of antiquity or of Plato himself required the literal truth of history in such a case. The "Wahrheit und Dichtung" of poetry was enough. And it should be enough for us that Plato (as Dante said of Beatrice) has spoken of his master such words as no mortal ever said of another before or since. He made Socrates the second (Cicero, Plutarch, Epictetus, Marcus Aurelius, and Montaigne would have said the first) religious figure of the world. There is no trace of superstition or the lower mysticism in this. The attribution of these things to Plato, I am sure, to Socrates, I believe, is a misapprehension of literal-minded modern criticism inappreciative of the art which "sublimates" to spiritual uses the language and the imagery of all Dionysiac and Eleusinian initiations, all Orphisms and Pythagoreanisms, but always evades with delicate irony, sometimes with a *hos ara* that the modern interpreter overlooks, their concessions to irrationalism and the concrete supernatural.

My time limits me to this slight indication of the argument on the first two heads of my brief. And I turn at once to the central issue, the origin and nature of Plato's metaphysical philosophy — not of his political, social, and literary opinions and his criticism of life, but of the theory of ideas, so-called.

There is no mystery about the origin of the theory of ideas. The Platonic dialogues confirm the simple statement of Aristotle. We see the idea emerging as the hypostatization of the Socratic ethical concept. It is the reality, the thing postulated by that unity of the definition, which the Aristotelian logic postpones to the ultimates of the metaphysics and fails to explain there. In Plato the terminology that dramatically explains to an interlocutor innocent of logic what a definition is, passes into the terminology of the transcendental idea by such insensible gradations that it is impossible to say where the one ends and the other begins. It ought not to be necessary to labor this point further. The real problem is: Why does Plato persistently reaffirm the doctrine, though he knew it to be a paradox and has anticipated most of the objections of Aristotle and the moderns?

Some meet this difficulty by saying that Plato abandoned or modified the doctrine. There is no time to revive that old controversy which ought to be regarded as definitively closed. The Platonic writings clearly show that Plato did not abandon the doctrine; and there is no evidence that he appreciably modified it. All speculations about Plato's later theory of ideas, and particularly the notion of a special relation of the ideas to mathematical concepts, so far as they appeal to the Platonic text, rest on sheer misinterpretation or on over-ingenious and far-fetched metaphysical combinations. I have pointed out these misrepresentations in the concluding pages of my *Unity of Plato's Thought* and am justified in paying no attention to the supposed "later theory of ideas" until there has been some attempt to answer my quotations and interpretations of the texts. And when Professor Whitehead incidentally dogmatizes that the Platonic world of ideas is the refined revised form of the Pythagorean doctrine "that number lies at the base of the real world," we may fairly ask him to submit evidence that will endure critical examination. There is none.

Plato undoubtedly sometimes uses mathematical definitions and abstractions in illustration of the theory of ideas precisely as he uses other concepts. In the *Phaedo* he uses the idea of equality to emphasize the point that the material object always falls short of the idea or ideal. I have no desire to minimize the influence of mathematics on Plato's thought or the part it holds in his mature psychology and educational philosophy. I am merely pointing out, what is apparent to any unbiased reader of the dialogues, that the theory of ideas did not originate in mathematics. We distinctly see it emerge, as Aristotle says it did, from the pursuit of the definition of ethical terms, and in all the critical passages concerning the doctrine, it is on *these* or on *all* general terms that the emphasis is laid. There is no evidence anywhere that the doctrine originated in Pythagorean mathematics, and speculations as to the manner in which it *might* have so originated are mere exercises of ingenuity, have nothing to rest on, and are contradicted by the direct testimony of Aristotle if he is not misinterpreted.

We return then from this unavoidable digression to the question: Why was Plato always ready, if challenged, to reaffirm so strange a doctrine? We cannot answer this question or, indeed, discuss the theory of ideas at all without distinguishing its different aspects. It is, in the last analysis, a metaphysical or epistemological theory which can be understood only by entering into the substantive problems involved. But there are two other simpler aspects of the doctrine which suffice for the understanding of a large part of Plato. It is (1) an affirmation of ideals and (2) a brief dogmatic postulate of the pragmatic necessity of the concept or the general notion against the cruder forms of nominalism.

The idea as ideal we must here leave to the poets and artists. It is a very significant part of Plato's teachings but is not needed for our present purposes.

The idea as a postulated reality behind the general notion, a provisional explanation of the meaning of meaning, is the origin of the doctrine and the aspect which predominates throughout Plato except when an ultimate metaphysical issue is explicitly raised. What I call crude nominalism is in every age more than an attempt to explain general ideas. It is often in practical effect an endeavor to explain them away. The materialistic nominalist not only believes that conceptual thought, that meaning, is as simple a thing as Mr. Watson makes it out to be. He persistently obtrudes this metaphysical conviction in the form of irrelevant protests against the ordinary literary use of harmless, necessary, general, and abstract ideas in discussion and education. He is always repeating with some Diogenes or Antisthenes that he can see *anthropos* but cannot see *anthropótes*. He objects with Mr. Cabell and the schools of education to a rational teaching of mathematics because "2 + 2 = 4 is fiction, though it is true that 2 apples plus 2 apples are four apples."

Plato's affirmation of the ideas is in many cases merely a short peremptory reaffirmation of the "pragmatic" necessity of conceptual thought against this type of nominalism.

From this point of view the doctrine of ideas is little more than a logic or postulate of logic. It is mainly though not exclusively that in the *Phaedo*, than which no Platonic dialogue has been more grossly misunderstood. Plato knew as well as we do that he could not prove personal immortality. It was for him, as in a lesser degree for John Stuart Mill, a rational hope based chiefly on the failure of materialism to account for mind. That is the main argument of the *Phaedo*. The argument from the comparison of the soul with a harmony, in which so many interpreters have lost their way, does not really depend on the musical metaphor as such. It means little more than the generalized affirmation that no complication of bodily structure really explains mind and the functions of mind. The final demonstration superadded to this is a bit of logical ingenuity that did not deceive Plato and should not us. Its main interest is its explicit illustration of the use of the theory of ideas merely as a neutral form of the logic of intension. The Aristotelian syllogism, as I have recently shown,[1] is directly developed from this. In this purely logical use the theory of ideas is detached from all metaphysical assumptions, even from the notion of design. The method of ideas in the *Phaedo*, as I have repeatedly pointed out, and as is now beginning to be recognized here and there, is not a teleological method. On the contrary, it is the explicit, if regretful, renunciation of teleology as a desirable but, in the then state of knowledge, impracticable scientific ideal.

But though the ideas need not, in any given case, commit us to metaphysics, the metaphysical problem is always lying in wait for us, and we cannot understand Plato without it. It is the eternal question debated by Plato's pupils in the Academy, throughout Aristotle's *Metaphysics*, by the schoolmen, by Locke, by Berkeley, Hume, Taine, and the Mills, and reappearing today in the controversy as to the meaning of meaning. Is there or is there not something distinctive in human conceptual thought, something inexplicable by the purely naturalistic methods of brain-anatomy and physiological psychology? Don't tell me that this is a naïve question which only shows that I am an amateur, hopelessly behind the times. I admit that if you are satisfied with the simple explanation which Mr. Watson offers to the readers of *Harper's Monthly*, there is no problem, and the Platonic theory of ideas becomes merely an historical curiosity, an illustration of the superstition or the helplessness of the mind in the making. But with Platonism, as Mr. Watson would be the first to affirm, vanishes every form of metaphysical philosophy, and you are left with a creed of uncompromising and absolute Epicurean, agnostic, positivist, or if you prefer pragmatic or behavioristic, materialism. Whatever may be your personal conviction, it is plain as a matter of historical fact that a large number of intelligent thinkers to-day are not willing to accept this branch of the alternative, and do not believe that human abstract thought and the meaning of meaning are quite so simple as the physiologists and the behaviorists would make them out to be. For the bare historical fact it is enough to refer to the immense literature on the meaning of meaning and the recent thoughtful and instructive book of Professor Henri Delacroix, *Le Langage et la Pensée*.

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[1] "The Origin of the Syllogism," *Classical Philology*, Jan., 1924.

Now my contention is that the text of the dialogues shows that Plato was as clearly aware of this alternative as we are. While using the ideas ordinarily as symbols of the ideal or as counters of logic he was always ready, if driven to the wall, to reaffirm them as transcendental entities mainly for two distinguishable if not distinct reasons: (1) The doctrine of ideas was the only alternative to materialism and the flux, which he would not have on any terms. This he explicitly says. (2) Since, to escape materialism and the flux, it was necessary to postulate *some* transcendental reality, and since mechanistic materialism seems to many good minds to stand or fall largely by its success or failure in explaining distinctively human conceptual thought, it was an ingenious device and also a strong strategic position to adopt as *his* absolute transcendental entity, the general and abstract idea to the hypostatization of which dialectics and the quest for the definition naturally tempt the ordinary mind. This second reason Plato, of course, does not state in the form which I have given to it, and it is open to question how far he was distinctly conscious of it. But there can be no question but that this is what he actually did. There had to be something raised above the flux and inaccessible to the purely materialistic interpretations of mind which he satirized in the *Phaedo* and more seriously refuted in the *Theaetetus*. Human conceptual thought is, in the opinion of many thinkers today, a something of that kind. Why then should we be surprised that the logical, the artistic, the constructive genius of Plato chose the ideas for his metaphysical absolute, his *Ding an sich*, and defiantly reaffirmed the doctrine when challenged?

Before we dismiss it as a *naïveté* of the childhood of thought, let us ask ourselves what we have to put in its place — always on the supposition that we are not satisfied with Mr. Watson's "laryngeal processes." Aristotle's explanation, in a well-known passage at the end of the *Posterior Analytics*, was that the human mind is by nature capable of this experience, this function. [*Anal. Post.* II 19, 99b 20 ff. ἡ δὲ ψυχὴ ὑπάρχει τοιαύτη οὖσα οἷα δύνασθαι πάσχειν τοῦτο.] Just so. Similarly, an eminent American psychologist observes in the innocence of tautology that "the generality or conceptual character consists in the addition of the feeling of generality to some element or combination." And we are little more advanced by the observation in Wittgenstein's *Tractatus Logico-Philosophicus:* "That which is peculiar to the 'symbolism of generality' is firstly, that it refers to a logical prototype, and secondly, that it makes constants prominent." So much we have already learned from what I have called the non-metaphysical aspect of Platonic ideas. But as a contribution to the clearing up of the ultimate *aporia*, this sort of thing recalls the Epicurean invocation of an additional "omnino nominis expers" to account for the soul. But what have we gained if, after rejecting the simple paradox of the directly hypostatized idea, we are driven to Aristotle's *noesis noeseos* in the mind of an unchanging God, or to the Stoic Zeno's "als ob" evasion that the concept or the idea is not Being and not Something, but is "as if" a something being; or to Berkeley's not ideas — oh, no — but notions, yes, notions; or to Mr. Santayana's *Essences;* or to Professor Woodbridge's "the idea is the object functioning in discourse;" or to Professor Whitehead's "isolation of eternal objects in the realm of possibility" — which is certainly little less nephelococcygian than Plato's *hyperouranios topos* — or back again to Aristotle's mind of God composed of its own thoughts? In short, if we cannot acquiesce in Plato's repeated statement that the ideas are hard to accept and hard to reject but that we cannot do without them, it would be simpler to go all the way with Mr. Watson and dismiss the entire problem in his own chaste and scholarly English: "There is no reason for hypothecating a mystery about it."

Be that as it may, the entire origin, history, and significance of the theory of ideas lies clearly before us in the Platonic dialogues, if we will take the trouble to understand them, and there is no need to "hypothecate" or imagine either a Pythagorean or a Socratic origin for them.

It may be thought that we have been reading our own ideas into Plato by attributing to him these foresights and subtleties of intention. However plausible such a generalized objection may seem to a modernist, it must yield to specific evidence.

And the more closely and critically one studies Plato, the more apparent it becomes that the one way to misunderstand him is to make condescending allowance for the *naïveté*, the immaturity, the primitive unscientific unsophisticated quality of his thought. Mankind has undergone many vicissitudes of experience since Plato wrote, by which philosophers must endeavor to profit.

But philosophy itself, metaphysic, epistemology, speculation about ultimates in cosmogony, religion, ethics, and politics, and the subtlety and logic of the art of debate have progressed since Plato just about as much as epic has improved since Homer, tragedy since Sophocles, sculpture since Phidias, and eloquence since Demosthenes.

The Platonic dialogues are accessible, and in proportion to a reader's intelligence, scholarship, and patience, of course, to read to the end and reread, he will perceive that Plato is not merely a supreme dramatic artist and moral idealist, but that he is the keenest thinker and most completely alert mind that has left a record of itself in all the literature of philosophy. Plato always knows what he is about, he always places the emphasis to suit his purpose, always comes back to the predetermined point from every seemingly capricious digression. He is aware of the ambiguities, and foresees the consequences, of every statement. He, in the American phrase, never "misses a bet," rarely, if ever, trips in his logic, or contradicts himself, except for a conscious purpose. He presents the opposing case, the other side, on every large issue better than its professed advocate could then, or can now. And he anticipates and answers, as far as it is humanly possible to answer them, our foreseen objections to the conclusions to which he finally inclines as either the truth or the only workable rule for reason, the only tolerable faith for life. And the proof of all this? It is simply the fact that every attempt to interpret him otherwise breaks down. All endeavors to catch him tripping only recoil on their authors and betray the flaws or negligences of their scholarship, the inadequacy of their philosophical equipment.

This experience, if not scientifically conclusive, has been repeated often enough to raise a presumption. The challenger for Plato cannot be expected to enumerate and expose the innumerable misinterpretations of his text and meanings current in books of supposed authority. We are provisionally justified in simplifying the issue to this effect: let the critic name any book or essay that alleges any considerable measure of bad reasoning, self-contradiction, or the fumblings of undeveloped thought in Plato, the scholarship of which will bear critical examination. If no such book can be found, the presumption prevails. Name the book, and an issue is joined to be tried in any journal that will provide the space.

THE CRUCIAL TEST

W. A. Heidel
(*Wesleyan*)

SOCRATES, Plato, and Aristotle form almost a closed cycle, the series once begun running naturally, almost inevitably, to its conclusion. In so direct a development it is difficult to say where one stage ends and another begins. One who has himself been under the influence of a master mind, however much given to introspection and self-criticism he may be, will frankly acknowledge the impossibility, without the aid of very abundant notes, of deciding just what is his own and what he owes to his teacher. Is it likely that we today can with accuracy and certainty determine the rights in severalty in the joint product of the minds of Socrates and Plato and assign *suum cuique?*

With much that Professors Burnet and Taylor have said I am in hearty accord; indeed, I have to a considerable extent been saying very much the same things to my students for years before these scholars published their views. At many points, however, most of which there is at present no time to specify, my studies have led me to form different conclusions. By and large, moreover, the newer views do not differ so fundamentally from those long held by reasonable scholars as their defenders appear to think. That the "minor" or "Socratic" dialogues of Plato contain little, if anything, which might not have been said by Socrates; that in a middle group of works, e.g., in the *Phaedrus* and *Republic*, the question arises at every turn whether Socrates, had the matter been laid before him, would have acknowledged as his own the views and doctrines there set forth; finally, that in the *Laws* Plato was presenting his own mature thought on subjects which had long engaged him — all this, surely, is no novelty. Moreover, no one will hold that the dialogues of Plato at any point give the *ipsissima verba* of his master.

Such being the case, one naturally asks what precise service the new theory, or rather presumption, can render. If it serves, as I trust it may, to direct attention anew to Socrates and lead scholars to a fresh study of his thought, it will have accomplished something very much worth while; for I am of the opinion that the contribution of Socrates is the most original and fruitful in the history of philosophy.

As regards the new views propounded by Professors Burnet and

Taylor, it seems to me that they lend themselves ill to discussion at such a symposium. There are, indeed, certain general assumptions made which may be debated, one of which will presently engage our attention; but for the most part the decision must depend upon special points too numerous to be considered here. I shall, therefore, confine myself largely to a group of dialogues which have long claimed the special attention of all who have wrestled with the Platonic problem.

As much as thirty years ago[1] I emphasized the point that the interest of Socrates in setting up logical definitions led naturally to the fixation and hypostatization of the concept, and that Plato's specific problem was to mediate the concept back to the sensible world, a movement which led in turn to the fixation of the percept in the philosophy of Aristotle. This distinctively Platonic movement of thought is as apparent in the *Theaetetus*, the *Sophist*, and *Statesman*, as it is in the *Philebus* and the *Laws*. Though by a psychological necessity it led Plato to lay less stress on the hypostatic character of the Ideas, it does not follow that he abandoned that doctrine, any more than Aristotle's logical difficulties, arising from his acceptance of fixed percepts and fixed concepts, taught him to revise his inherited assumptions.

Whether one chooses to call the views, set forth in the dialogues above mentioned, the "Platonic" (as distinguished from the Socratic), or the "later Platonic" philosophy, matters little for our present inquiry; the important fact is that these views are acknowledged to belong to Plato rather than to Socrates. The new view holds that in general the "Socrates" of the Platonic dialogues is the historical Socrates. It must be acknowledged that a theory, which does not cover all the facts and can be said to be at most "generally" in accord with them, ill serves the purposes of a criterion. Moreover, Socrates does not stand alone. In the *Parmenides*, the great Eleatic philosopher, after whom it is named, conducts a discussion, which one might concede to be appropriate to one of his school living at the turn of the fifth and fourth centuries, but is, and is acknowledged to be,[2] impossible in the mouth of the historical Parmenides. If this be true of "Parmenides," for whom the dialogue professes veneration, why, one asks, should it be held inconceivable in the case of the venerated "Socrates"? Indeed it is confessed[3] that in the *Theaetetus*, notably in the reinterpretation of Heraclitean and Protagorean doctrines, "Socrates" sets forth views which can under no circumstances be attributed to the historical Socrates. In the *Sophist* and *Statesman* also, "Socrates" is present, though his is a minor rôle, while the "Eleatic Stranger" conducts an inquiry, which is acknowledged[4] to embody Plato's own logical doctrines. If that be true, whether or not the argument be directed against the Megarians, "Socrates" is certainly in these cases a fictitious person, or Plato has been guilty of a gross anachronism. In like manner in the *Philebus*, Professor Burnet's "crucial case,"[5] "Socrates" conducts an inquiry into the nature of the Good, which assuredly is Plato's own attempt[6] to moderate the ethical intellectualism of his master. There is no time to argue these points, and happily there is no need, since they have all been expressly or by implication conceded by Professor Burnet.

If one adds that even in the *Phaedrus* and *Republic*[7] Professor Burnet seems to hear at times the authentic voice of Plato, the question must be asked, just what remains of the new view? If one may not credit the historical Socrates with everything, without distinction, which the Platonic Socrates is made to say, the desired criterion is still to seek, and we are left substantially as we were before. We shall have to judge in every particular case according to the evidence, which is unfortunately neither abundant nor in general conclusive. I am quite of a mind with Professors Burnet and Taylor in regarding Xenophon as a broken reed, on whom one leans at one's own peril. Neither is much to be learned from Aristotle, who was in matters of philosophical history as little curious as he was critical, as witness his accounts of all his predecessors, including Plato. In particular he was never at pains to distinguish clearly between the historical and the Platonic Socrates, just as he neglected to distinguish between Plato and his immediate successors in the Academy. I cannot, I regret to say, share the confidence of these scholars in either the genuineness or the trustworthiness of the *Letters* attributed to Plato. Though conceding for the more important of these compositions a probable origin in Academic circles about the end of the fourth century, and therefore a certain measure of truth, so far as the outward facts of Plato's life are concerned, I seek in vain for evidence in them of the mind of the great philosopher.

In view of this state of affairs it seems to me inevitable that when historians attempt to determine what belongs to Socrates, what to Plato, there should always remain a considerable margin of debatable ground. This margin may, however, be reduced by a careful survey of all the available data, particularly such as testify to the questions in debate during the fifth and fourth centuries, respectively, and reveal the different temper of the times. In this regard Professor Burnet particularly seems to me to have made contributions of no small importance, the value of which is independent of his theory. In saying this I would not be understood as approving some of the conclusions to which he apparently attaches the greatest significance. I have, for example, expressed my dissent from his acceptance of the list of Pythagoreans given by Iamblichus and the deductions drawn from it, and I cannot regard Socrates as wholly or partly a Pythagorean. That Socrates adopted the Orphic conception of the soul and drew inferences of the utmost importance from it, seems to me certain; and that the only previous attempts at definition which may be considered as antecedents of the Socratic concepts were made in the field of mathematics, which was largely under the influence of Pythagoreans, I believe to be equally clear. But these points of contact with the sectaries of the North and West are in my view no more significant than his agreement in many interests and presuppositions with the leading Sophists of the day. His was a mind open to all the influences of the time; but he was neither an eclectic nor an adherent of any school. What constitutes his originality is the complete fusion of many interests and points of view in one consistent whole — on the ethical (and perhaps the physical) side, the quest of the Good; in the intellectual sphere, the quest of knowledge and wisdom, conceived as the apprehension of things in their essences, teleologically defined. By temperament an individualist, he interpreted the Delphic oracle not merely as a call to achieve the Good in his own life but also as a divine mission to further it in the lives of others; and because, as a Greek and a citizen of Athens in the Age of Pericles, he could not divorce ethics and politics, he undoubtedly discussed politics, though not necessarily in quite the manner of the *Gorgias* and the *Republic*.

Our knowledge of Socrates depending almost wholly on Plato, who cannot for obvious reasons be mechanically sifted for the grains of historical truth he certainly contains, we are likely to find ourselves arguing in a circle. The task of the historian who feels bound to discriminate between master and devoted disciple is here one of extraordinary difficulty, and at many points one can expect nothing more than a probable conclusion. For the life of Socrates and his relations with his contemporaries I believe that we may trust Plato, because his opportunities for inquiry and his personal connections were such that he could not well go far wrong; besides, Plato, unlike Aristotle, had a real historical sense. But as regards the history of thought the case is quite different; for Plato was obviously most concerned about the thought itself, and the dramatic form of his writings ill lent itself to the discussion of matters which would have necessitated the introduction of personalities in a way he little liked. That in this regard he was guilty of anachronisms and disregard of historical truth the dialogues we have considered above may be said to give abundant proof.

NOTES

[1] *The Necessary and the Contingent in the Aristotelian System*, Chicago, 1896, pp. 10 ff.

[2] See Burnet, *Greek Philosophy*, Part I, p. 236. If the "third man" (*ibid.* pp. 253 ff.) is of Megarian origin, the conclusion is certain.

[3] *Ibid.* pp. 235, 236, 242, 245, 251.

[4] *Ibid.* pp. 236 ff., 274 ff. Cp. Burnet's *Plato's Phaedo*, pp. xxxvi f.

[5] Burnet's *Plato's Phaedo*, p. xxxvi.

[6] Burnet's *Greek Philosophy*, Part I, pp. 324 ff.

[7] *Ibid.* p. 232.

SECTION 2

Time: Wednesday, September 15, 9.30 A.M.
Place: Gore Hall Common Room
Subject: Mediaeval Philosophy, with Special Reference to the Problem of Creation
Chairmen: Edward A. Pace, Catholic University of America
James H. Woods, Harvard

RATIONALISM AND MYSTICISM IN THE SCHOLASTIC MOVEMENT

William Turner
(*Buffalo*)

SCHOLASTIC philosophy, as everyone knows, has as a distinctive trait that it has much to do with theology. This relation is sometimes misunderstood. I do not intend in this paper to untangle the web of such misunderstandings. I turn rather to the thought that, if we look somewhat closely, we shall find that in this respect scholasticism, after all, was doing what philosophy is always attempting to do. Philosophy always and everywhere takes the world of thought and feeling and emotion and sentiment and activity as it finds it. It finds that world unarranged; it tries to arrange it. It finds experience, to use a general term, unordered, unconnected, and it tries to bring in order and connection. It finds its world unsifted, and it tries by reflection to sift, to criticize, that is, to examine, and establish a scale of values. It finds its world confused; it tries to introduce distinctness. It finds chaos; it tries to fashion a chaotic world by reason into an intellectual cosmos. Now, the world in which the scholastic movement originated was a world of theological thinking. It was a world in which, and I hardly exaggerate when I say so, the things that are least real today were the most real of all, the other world was more actual almost, than this world. What we of today are most concerned about was of minor concern then. I do not mean to say that all men were saints, that the social order was ideal, that spirit reigned supreme over body — but I think I may claim that, for saint and sinner, for the high-minded mystic and for the ruthless robber alike, the realities that are in the world beyond our experience had more actuality than the facts of daily mundane experience. Therefore I present to you at the outset the scholastic movement in a guise in which it will appeal, I hope, to all of you. It was an attempt to set in order, intellectually, the world that then existed, a world completely saturated with belief, with faith, with a realization of the actual living realities of the Christian religion.

Naturally, then, scholasticism began as a kind of rationalism. And let us not forget that its beginnings were not without manifestations of intellectual courage. There were in those days, not only Bible Christians, but readers of the Bible exclusively. There were ecclesiastics who in the survival of civilization after the barbarian invasions, knew only the Scriptures, and maintained that the reading of the Scriptures was all the reading and all the study that was necessary or justifiable. The political world had been brought to ruin, and nothing remained except the sacred books in the way of literature. The very first scholastics began in the crudest kind of way to apply reason to the interpretation of the Biblical texts. Fredegis, the Anglo-Saxon, wrote a very curious treatise to show that the words of Genesis, "Nothing and Darkness," refer to realities, and that both Nothing and Darkness are substances. It seems puerile, almost shamefully infantile; and yet it is the awakening of reason, reason struggling without any heritage from the great philosophical past. Aristotle was unknown. Plato was unknown, St. Augustine scarcely known except in a few treatises that for the most part are not his at all. But the minds of a few monks here and there were stirring, and stirring in the direction of reasoning, examining, thinking.

The previous age had been barren of all attempt to think. A few books had survived from earlier times. Most of them were mere compilations, texts useful in school work, and Isidore, Rhabanus, even Alcuin, could do little except copy word for word from one text to a newer one. It was an age of compendiums. Then came that extraordinary person in such an environment, John the Scot, a meteor, as has often been said of him, and an Irishman certainly, by endowment, temperament, proven so by his faults as well as his virtues, but a mysterious personality and an unexplained flash across the dim horizon of the age. He came into an unexpected opportunity in the task of translating the works of the Pseudo-Dionysius. And he used that opportunity. I dare not go into his work as I should like to. If I did I should take all the time allotted for this paper. Let me say merely that he was, like his contemporaries, inclined to exalt reason as an exponent of faith, but he was dominated by his material, the mystic Pseudo-Dionysius, and was carried on by his Irish spiritual imagination to the formulation of a system that found no favor in his own day, and exerted no influence until, in the thirteenth century, it was used by the mystics in the Cistercian cloisters. Passing over Eriugena, then, as a most brilliant but by no means influential thinker, we come through the dull and unproductive tenth century to the eleventh. The original impulse of scholasticism was there, the valiant purpose to test the truths of common Christian acceptance by the light of human reason. It was in the eleventh and twelfth centuries that the real conflict took place. In Roscelin and Abelard rationalism had venturesome champions. In Anselm and to a greater degree in Peter Damian mysticism found equally daring defenders. The struggle centered on the somewhat dry problem of Universals. But the real issue was whether reason was to be exalted as a means of arriving at truth, or faith to be made the principal means of arriving at an understanding of reality. There was much exaggeration and considerable abuse. On the one side faith was decried as obscurantism, and logic (or dialectic, as it was called) was claimed to be the key to every problem. On the other side reason was condemned as dangerous and logic referred to as "the devil's art."

The struggle went on into the twelfth century and the early decades of the thirteenth. Meantime the University of Paris had grown out of the schools and the works of Aristotle had begun to be known. The field of enquiry was thereby widened very extensively and covered the whole range of the sciences as they were then known. There was still the rationalizing tendency, which now found its expression in Aristotelianism and there was still the mystical tendency which resulted in Augustinianism. Before the close of that wonderful thirteenth century the two had blended in the philosophy of such men as Albert the Great, St. Thomas, and Duns Scotus. It was St. Thomas who gave the clearest and simplest exposition of the principles on which this reconciliation was effected. Briefly, there were two principles then for the first time acknowledged, which seemed to give to both reason and faith the share due to each in the task of synthesizing and organizing all knowledge. The principles are "credo ut intelligam," which may be translated "faith aids reason" and "intelligo ut credam," which may be rendered "reason aids faith." I do not intend to enter into the arguments by which these principles were sustained; for we are not yet at the end of the struggle.

In the fourteenth and fifteenth centuries another form of rationalism appeared in the nominalism of Ockham and the revolt

of the Ockhamites against authority, though this was curiously influenced by the confused political conditions arising out of the struggle between civil rulers and the papacy. And there was mysticism also of the more moderate kind represented by Gerson and in its best known form by the *Imitation of Christ* of Thomas à Kempis.

I have endeavored to show without going into detail, or citing authorities, what it was that the scholastic movement was chiefly concerned about. It seemed to me to be the problem of reason and faith, rationalism and mysticism. The contents of that philosophy I have not touched upon at all. Those contents are rich and varied. But they attract little attention nowadays except among those who have devoted themselves to the study of the ponderous volumes of the schoolmen and have mastered the difficulties which keep those volumes closed for the average student of philosophy. On the other hand it may fairly be claimed that the attempt to organize the great body of experience in mediaeval times appeals to all of us, once we understand this age-long struggle which determined the method of scholasticism.

L'ÉTUDE DES PHILOSOPHIES ARABES ET SON RÔLE DANS L'INTERPRÉTATION DE LA SCOLASTIQUE

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Il n'est pas une histoire de la philosophie médiévale, pas un livre concernant l'un quelconque des grands penseurs du XIII^{e} ou du XIV^{e} siècle, qui ne signale en quelque endroit le rôle joué par la philosophie arabe dans l'évolution des idées au moyen âge. Auguste Comte marquait déjà fortement l'importance décisive du facteur musulman dans l'histoire de la pensée philosophique et scientifique; il y aurait donc quelque naïveté à y insister.

Ce qu'il est par contre légitime, et peut-être même utile de se demander, c'est si le fait bien connu de l'influence arabe a été pris suffisamment en considération par les historiens. En d'autres termes, étant donné que la pensée d'Avicenne, de Ghazali et d'Averroës a, de notre aveu commun, joué un rôle décisif dans l'histoire de la philosophie médiévale, lui accordons-nous, dans nos recherches, la place à laquelle elle a droit?

Une première cause qui semble avoir détourné les historiens de le faire, est que l'on a longtemps envisagé sous une perspective essentiellement thomiste l'histoire des idées au moyen âge. Nous connaissons tous ces histoires allemandes de la philosophie où les philosophes antérieurs à Kant sont étudiés en tant qu'ils ont été les préparateurs du criticisme, tandis que ceux qui sont venus après lui sont étudiés en tant qu'ils en sont les continuateurs. La même illusion de perspective a longtemps conduit à étudier Malebranche, Leibniz et Spinoza, au XVII^e^ siècle, comme s'ils avaient été principalement des cartésiens. Et c'est encore elle qui nous induit à organiser toute l'histoire de la philosophie médiévale autour de saint Thomas: ceux qui l'ont préparé, ceux qui l'ont combattu, ceux qui l'ont suivi. Rien ne serait plus aisé, s'il en était besoin, que de montrer tout ce qu'il y a de vrai au fond de cette illusion et qui, dans une certaine mesure, l'excuse ou même la légitime. Ce n'en est pas moins une illusion. Saint Thomas n'était pas, au XIII^e^ siècle, ce qu'il est devenu depuis. Attaqué violemment par les uns, suivi avec enthousiasme par les autres, il fut pour tous ce qu'est pour nous un philosophe contemporain, si grand soit-il: un homme qui s'attache à résoudre les mêmes problèmes dont notre conscience est obsédée, et dont nous discutons librement la solution.

Appliquée au problème historique de l'influence arabe, cette perspective thomiste fait apparaître l'ordre de doctrines sous l'aspect suivant. Au début du XIII^e^ siècle, la pensée d'Aristote se trouve révélée au monde latin, sous la forme contaminée et impure que lui ont imposée diverses philosophies arabes, notamment celles d'Avicenne et d'Averroës: après un travail critique préparatoire auquel Alexandre de Halès et Albert le Grand ont pris une part active, saint Thomas réussit à dissocier définitivement l'aristotélisme authentique des éléments étrangers que les arabes y avaient introduits. Au XIV^e^ siècle, à part un groupe obstiné d'averroïstes qui vont réjoindre le XV^e^ siècle, l'interprétation définitive d'Aristote est fixée, et l'influence des philosophes arabes n'a plus à être prise en consideration.

Un premier fait qui doit attirer l'attention sur le caractère simpliste de notre commune attitude, et le nombre considérable d'éditions imprimées d'Avicenne et d'Averroës qu'il serait facile de signaler à la fin du XV^e^, au début du XVI^e^ et jusqu'à travers tout le XVII^e^ siècle. Les éditions d'Averroës pourraient à la rigueur s'expliquer par la persistance bien connue de la secte averroïste qui prépare le naturalisme italien de la Rénaissance et le mouvement libertin. Mais, à supposer que nous ne commettions pas les plus grossières erreurs sur le rôle réel d'Averroës au moyen âge, il nous resterait encore à expliquer pourquoi l'on éprouvait encore le besoin d'éditer Avicenne en 1493, puis en 1495, en 1509, en 1546. Si l'influence de cette pensée ne se faisait plus sentir et si son contenu était devenu sans intérêt pour la philosophie chrétienne, pourquoi les éditeurs de 1508 furent-ils des Chanoines Réguliers de Saint Augustin, résidant au couvent de Padoue, qui se plaignent dans leur Préface de la peine immense que leur a coûtée un tel travail? L'examen des manuscrits confirmerait cette expérience. Le manuscrit latin de la Bib. Nationale, 6443 (ancien Colbert 300) date du XIV^e^ siècle; or ce recueil peut être considéré comme une véritable somme de philosophie arabe. Il atteste, par sa composition même, que l'on éprouvait encore à cette époque le désir d'avoir, réunis sous la main, les écrits d'Avicenne, d'Averroës, d'Algazel, d'Alkindi et d'Alfarabi. Le mss. 8802, qui appartint à la Bibliothèque publique d'Oxford, à Roger de Gaignières, et porte une reliure aux armes du chevalier Kenelm Digby, l'ami de Descartes, témoigne du même souci, à peu près à la même date. De nombreux recueils manuscrits pourraient être allégués à l'appui de cette assertion.

Mais il faut aller plus loin. Non seulement l'existence de ces recueils atteste que l'influence arabe continua de s'exercer, après comme avant saint Thomas, mais leur composition atteste qu'elle s'exerça d'une manière tout autre qu'on ne l'a cru jusqu'à présent. Dans le remarquable mémoire qu'il a consacré au traité d'Alfred de Sareshel, *De motu cordis*, le très regretté Clemens Baeumker distinguait deux époques dans l'histoire de l'influence arabe: l'une où Avicenne aurait exercé une influence décisive, l'autre, plus tardive, où se serait exercée l'influence d'Averroës. Il est exact, en effet, que l'influence d'Averroës se soit exercée plus tardivement que celle d'Avicenne, mais cette dernière n'a jamais cessé de s'exercer, bien que l'on en ait jusqu'ici méconnu la persistance à travers le moyen âge tout entier.

Peut être suffirait-il d'en alléguer comme preuve le simple fait que les recueils manuscrits du XIV^e^ siècle et les éditions des XV^e^ et XVI^e^ siècles existent. Le moyen âge ne fut pas un âge d'historiens. S'il recopiai les œuvres d'Avicenne, c'est qu'il leur attribuait une importance doctrinale et qu'il en avait besoin; ce s'est certainement pas par dilettantisme ou par curiosité. Peut-être cependant l'analyse d'un exemple concret mettra-t-elle mieux en valeur la réalité de cette influence et l'importance capitale des problèmes historiques dont elle peut apporter la solution.

S'il est une personnalité médiévale dont l'importance égale celle de saint Thomas, c'est assurément Duns Scot. Or nul historien n'ignore que, malgré tant de controverses amoncelées autour de son œuvre, ni sa signification métaphysique, ni sa signification historique ne sont encore convenablement éclaircies. Certains voient en Duns Scot l'irréductible adversaire de saint Thomas; d'autres s'efforcent de les concilier; d'autres enfin, renonçant à les mettre d'accord, évitent de les mettre en conflit en présentant Duns Scot comme un métaphysicien qui forge de nouvelles solutions sans se préoccuper de celles que les autres ont déjà proposées. En réalité, sur presque tous les points où Duns Scot s'éloigne des fondements de la métaphysique thomiste, c'est qu'il suit la tradition d'Avicenne, tandis que saint Thomas suit celle d'Averroës. Dans la mesure où la remarque de Cl. Baeumker est fondée, il faudrait donc dire que Duns Scot, en tant qu'il s'inspire d'Avicenne, se rattache à une tradition doctrinale plus ancienne que celle dont s'inspire saint Thomas. Comme tous les augustiniens: Roger Bacon, saint Bonaventure et, dans une certaine mesure Albert le Grand lui-même, Duns Scot est un avicennien; ce que l'on considère parfois, comme des thèses novatrices du scotisme, ne sont bien souvent que des survivances de l'avicennisme, et c'est parce qu'elles lui sont communes avec les autres penseurs de son ordre, que ce prétendu révolutionnaire peut être considéré sans crainte d'erreur comme le continuateur d'une longue tradition.

Il ne serait pas impossible de montrer que, sur chaque point décisif, Duns Scot opte pour Avicenne contre Averroës. L'objet de la métaphysique, selon Duns Scot, est l'être, parcequ'Avicenne l'a démontré. Les preuves de l'existence de Dieu seront essentiellement métaphysiques et prises de l'être, non physiques et par le premier moteur, parce qu'Avicenne a démontré que les preuves physiques sont d'ordre inférieur aux preuves métaphysiques. L'univocité de l'être, chez Duns Scot, se réclame directement d'Avicenne. Le réalisme de Duns Scot se fonde également sur la doctrine avicennienne de la *natura* indéterminée. La théorie qui attribue à l'homme une *forma corporeitatis* distincte de l'âme, est simplement une doctrine empruntée à Avicenne. Comme l'a fort bien dit Maurice du Port, un ancien commentateur de Duns Scot: *Favet namque Avicennae inter philosophos ubique, nisi sit contra fidem; et Augustino inter doctores catholicos, et Paulo inter Apostolos, et Joanni inter evangelistas, et nimirum, quia feste Boetio, omnis similitudo appetenda est.*

Maurice du Port ne nous donne pas seulement une bonne leçon d'histoire de la philosophie scotiste, il nous indique une méthode pour l'interprétation de toutes les philosophies médiévales. Si la clef d'une métaphysique comme celle de Duns Scot est dans la doctrine d'Avicenne, c'est donc qu'au commencement du XIV^e^ siècle comme au commencement du XIII^e^, l'influence de la pensée arabe, et même de celle d'Avicenne, s'exerce encore avec une pleine intensité. Le cas de Duns Scot n'est pas le seul; ce n'est pas le seul; ce n'est qu'un illustre exemple; et l'on pourrait montrer que la théorie de la connaissance d'un Godefroy de Fontaines, par exemple, est née directement de ses réflexions sur la métaphysique d'Avicenne.

S'il en est ainsi, les conclusions générales qui suivent me semblent mériter d'être soumises à la discussion.

1° Il n'y a nulle raison *a priori* de limiter à une période quelconque du moyen âge l'influence de la philosophie arabe; elle semble s'être exercée continuellement du dernier tiers du XII^e^ siècle jusqu'à la Renaissance.

2° Il n'y a aucune raison *a priori* de supposer que l'influence d'Avicenne se soit effacée derrière celle d'Averroës; bien des faits suggèrent au contraire que la philosophie d'Avicenne a conservé des adhérents jusqu'à la Renaissance.

3° On n'obtiendra aucune interprétation correcte des philosophies médiévales, tant que l'on n'aura pas fait précéder leur étude de celles des philosophies arabes qu'elles réfutent ou dont elles s'inspirent. La pensée arabe et la pensée latine, que nous tendons plus ou moins à isoler dans la pratique, ont été en continuité historique, et l'étude que nous en faisons doit tenir compte de cette continuité plus qu'il n'a été fait jusqu'ici. Averroës, Avicenne et Algazel devraient être aussi familiers qu'Aristote à celui qui veut étudier les philosophes scolastiques. L'idéal serait de les posséder comme Albert le Grand, saint Thomas et Duns Scot eux-mêmes les possédaient.

4° L'une des tâches les plus urgentes qui s'imposent serait la réédition des traductions latines médiévales des philosophes arabes en général, et d'Avicenne en particulier. Cette œuvre, possible pour un individu lorsqu'il s'agit de traités relativement courts comme l'édition d'Alkindi par A. Nagy, dépasse les forces de tout individu lorsqu'il s'agit des grandes œuvres d'Avicenne et d'Averroës. Il serait hautement souhaitable qu'une organisation internationale de médiévistes se constituât et prît en mains la direction d'une entreprise au succès de laquelle l'avenir de nos communes études ne paraît directement intéressé.

THE MOSLEM DOCTRINES OF CREATION

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THE Moslem story of creation is a short one. According to the Qorân, the world was completed in six days, from the lower parts upwards: the earth first in two days, all that is in it in two days more, and in the last two days the world of the seven heavens. Unlike the God of the Bible story, Allah did not survey the work of His hands nor pronounce it good. The Moslem God, who never sleeps, has no week-end and no sabbatical year.

It is said that everything on earth was created for man, especially the animals. So man ranks high among creatures, but Allah, the Creator, is the Most High; there is nothing like Him, no Creator but God. Man, like the poets, cannot create anything real, but only lies, falsehood.

The Qorân has no elaborate cosmology. In his later years, at Medîna, Mohammed was much occupied with the Present. He was the head of a Commonwealth and the commander of Holy Wars. And previously, in Mecca, he had been the Prophet of the next world, a Warner and a Messenger, the fear of Allah and the Day of Judgment being the two poles of his preaching. Not the beginning, but the end of the world was his point of view. The past was only introduced to give lessons for the future, the first creation as a guarantee for the second, i.e., the resurrection.

In the Qorân, then, the creation is above all a token of divine power, or, in so far as that which has been created is useful to man, of divine goodness. References to the harmony of the heavens and the beauty of the human form are very rare.

An old Moslem tradition added to this that Allah created man after His own image. Later traditions are much influenced by ideas of Hellenistic and Oriental origin regarding the emanation or manifestation of God in the world. Said Allah, "I was a hidden treasure but wished to be known and therefore I created the world." Knowledge or Intelligence is also said to have been the first creature. Often the creation of angels, spirits, jinn, and of the souls of men, is considered to precede the creation of a material world by some thousand years.

Theological speculation in Islâm begins with the Mu'tazilite school, which was influenced by Christian dogmatics and Hellenistic philosophy. According to it, God is the Creator, the Holy, the Righteous, who cannot be the author of evil. Man, however, endowed with a free will, is the creator of his own deeds and God rewards him according to his deserts. God is also the Wise and the Good, who does everything for the best, especially for the best of His servants. By thus emphasizing the wisdom, goodness, and righteousness of the Creator, the Mu'tazilite school limited His omnipotence and His will. God had no need to create a world, perhaps He could make a better one, but willing it He must make it all good. In accordance with Stoic theodicy it was held that God did not create anything evil or hurtful, plants or animals. For instance, God did not make wine. Wine is bad, for God has forbidden the drinking of it. Therefore, Allah did not create wine, but the wine-merchants make it. You know how it is.

All this differs widely from the simple faith of the first believers. Their traditional Allah was the God of things as they are; the Mu'tazilite school paid homage rather to the God of things as they ought to be. Many of the new theologians went so far as to maintain that creation precedes revelation. Man has an inborn knowledge about his Creator, but revelation is something adventitious, an acquired knowledge. God's creative word Be was a substance, but the word of revelation was something accidental, in the mind of angels and prophets. In theological terms it was said, that the holy Qorân was not eternally with Allah, but a simple creature.

I cannot fully deal with the different opinions of the Mu'tazilites. The most famous of them, Nazzâm, holds that God's knowledge is the greatest power, making the best of all conceivable worlds. A will in the proper sense of the term — which implies a need — is not to be attributed to Him. Will is only a designation of the divine action itself. Creation is an instantaneous, timeless act, in which all things were produced at once so that one thing is hidden in another. In the process of time, then, the various specimens of minerals, plants, and animals, as well as the numerous children of Adam, emerge from their latent condition and come to light. All this is a process of natural causality.

A disciple of Nazzâm, Djâhiz, who shared the optimism of the Platonists, added to this, that the world was created a finite time ago, but never will be annihilated.

In contrast to the Mu'tazilite estimate of the world and of human activity, mysticism appears as a depreciation of all that is worldly— but only of the material world. The creation of this world is no glory to God, but is His self-humiliation. Therefore it may rightly be despised, because God Himself despises it. On the contrary, all-important to the mystics is the spiritual life, i.e., the creation of man in God's image, the breathing of the divine spirit into him. Thus conceived, the mystics regarded this world merely as a ladder to God, and could intensify their spiritual life until it reached a feeling of Godlike creative activity and happiness. They loved God and God loved them in a mutual love, an idea almost unknown to traditional theology.

In the beginning mysticism was a religious practice, but under foreign, especially Neoplatonic, influence, it became a philosophy of illumination.

Said the Qorân, "Allah's is the East and the West, and wherever ye turn, there is the face of Allah." "Everything is perishable, except His face."

Some Moslem sects took such expressions literally. They held that Allah, who is the First and the Last, after destroying not only the earth but also heaven and hell, will remain alone, just as before the creation of the world. The teaching of real mystics, however, was more thorough; for them the distinction of Allah from this world disappeared in an almost pantheistic way. By them the whole universe was considered as a differentiation, manifestation or emanation from the absolute Being, to whom all will return. While the orthodox Moslem said: Allah *works* all in all, the extreme mystic could say: Allah, who is the only Real, *is* all in all. He is the primeval, the eternal, some say the supereternal, and all creatures are merely temporal and passing.

In the polemics between Moslem theologians and philosophers the preoccupying problem was this: How does the temporal emerge from the eternal? Common sense found this kind of research very subtle and obscure, but philosophers had recourse to the Platonic-Aristotelian distinction between eternity and a duration without beginning and end. Generally Moslem philosophers held that the world, although created, never had a beginning and never will come to a close.

A more difficult problem for the philosophers was: How does multiplicity emerge from the One, contingent existence from the Essence that necessarily exists? Following Neoplatonic traditions they solved the problem by a theory of intermediation, by holding that God only is the first Cause, between whose activity and our sublunary world there are many intermediaries. There is a graded series of beings, actualizations, and possibilities, from the highest Form to the most objectionable matter, from the highest Spirit down to the meanest body.

Generally speaking all philosophers were in the same boat, but with slightly different sculls. Two schools, however, may be distinguished: one older, more Neopythagorean or Neoplatonic, according to which the emanation of a series of luminous spirits precedes the creation of a temporal material world, and a second more Aristotelian school, which modifies the Neoplatonic tradition by means of Aristotle's astronomical theory and his doctrine that the essence of God is thinking. God's knowledge is the creative power, creation is an intellectual process. From eternity the form or types of all things are in God, but from Him being One only one other being can emanate, i.e., the first Intelligence, also named the first created Spirit, which moves the outermost celestial sphere.

How came this sphere into being? From the second stage of creation the intellectual process evolves in a very particular way: while God only thinks Himself, and thereby creates a pure spirit, the first spirit thinks God and itself. There you have multiplicity. By the first Intelligence's thinking of its Author a second Intelligence comes into being; thinking of itself, and thus realizing itself, there proceeds from it the uppermost celestial sphere, etc. From the spirit of the last sphere, that of the Moon, proceed all the unstable things of our earthly world: elements, minerals, plants, animals, man, his spirit or soul as well as his body. The intellectual process of creation, therefore, down from the second stage, has parallel spiritual and corporeal results.

With slight differences this system is expounded by the philosophers best known in Europe, from Fârâbi to Ibn Rusha. God, thinking Himself, eternally expresses Himself by a pure act of knowing in the first Intelligence or, we may say, in the world as a whole. He had no need to do it, no purpose at all. God is the absolute perfect eternal Being, the world is the eternal Becoming. We cannot say that God is in the world, but rather that the world is in God. So the world as a whole does not change. In some metaphorical sense philosophers believed that the first morning of creation did write what the last dawn of reckoning shall read.

Orthodox Islâm offered a strong resistance to the philosophic doctrine of eternal creation. From the beginning traditional theology had emphasized the distance between the Creator and the creature. As the eternal, unique, true Creator, Allah is absolutely distinguished from this world. Under the influence of Christian theology it is held that the word of revelation, the holy Qorân, is eternally with God, but the word of Creation, Be, is itself created. It is true, God's creation is a timeless act, but the world is created a finite time ago. Generally it is concluded from the unstable transient character of this world that there must be an eternal omnipotent Creator. In favor of God's omnipotence, causality in nature and freedom of action on the part of man are suppressed as much as possible. Whatever happens in the world, happens by the almighty and inscrutable Will of Allah.

This theory is most consistently worked out by the later atomists of the Ash'arite school. Because Professor Macdonald was to deal with it, I pass over it.

In conclusion, four answers are given to the problem of creation. God created the world by His powerful will, says the traditionalist; by His good wisdom, the Mu'tazilite; by His overflowing love, the mystic; by an intellectual act, the philosopher.

So stated, differences are stressed, affinities dropped. Philosophers say too that God's thinking involves happiness, that He is the Loving and the Beloved. And orthodox Islâm has ever held that the dreadful Allah, to whom belong ninety-nine beautiful names, is also the Wise and the Merciful. Up to the thirteenth century, Moslem theology developed in various ways. The most outstanding figure in this development is Ghazâli, who, in his struggle against philosophy, partly in alliance with mysticism, produced a new theology. Though ascribing to this world a finite existence in space and time, he is fond of adopting mystic-philosophical theories of intermediation. God and man are not simply in the relation of Creator and creature to one another. As a member of the spiritual world, man in his being, qualities, and actions shows similarity to God, but his body belongs to the corporeal world. In accordance with Islamic tradition, however, Ghazâli regards man's composition from body and soul as more perfect than the pure spiritual state of the angels. Angels were commanded to bow before Adam, and the human Prophet stands above the highest of created spirits. Therefore the Moslem community rightly believes in the resurrection or a new creation of bodies and in the eternal integral joy of Paradise, which the Qorân promised. What God in His first creation joined together, let not philosophers put asunder.

THE PROBLEM OF THE ORIGIN OF MATTER IN MEDIAEVAL JEWISH PHILOSOPHY AND ITS ANALOGY TO THE MODERN PROBLEM OF THE ORIGIN OF LIFE

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(*Harvard*)

OF the many topics which are included under the general problem of creation the one upon which I should like to dwell in this brief survey is the specific problem of the origin of matter. Three views were held by mediaeval Jewish philosophers with regard to the origin of matter. First, matter was created by God *ex nihilo*. Second, matter existed from eternity alongside of God. Third, matter emanated from the essence of God. Of these three views, the first forestalled the problem, the second was merely an evasion of the problem, and the third, emanation, while meant to be a solution of the problem, really became a problem in itself.

The emanation theory as to the origin of matter presented to the mediaeval mind a problem analagous to, but the reverse of, the present-day problem as to the origin of life. Today, beginning with matter as the starting point of the process of evolution, we ask ourselves how did life originate. In the Middle Ages, beginning with God, or pure spirit, as the starting point in the process of emanation, they asked themselves how did matter originate. To appreciate the full significance of this problem to the mediaeval philosophers we must recall that emanation to them was a form of natural causality especially applicable to the action of spirit upon matter [1] and because of that the process of emanation had to conform to all the laws of natural causality. Now, one of the accepted principles of natural causality was that from a simple cause only one simple effect can be produced,[2] the necessary corollary of which was summed up in the dictum that matter cannot be produced from form nor form from matter — a dictum which may be traced back to the principle *ex nihilo nihil fit*. The mediaevals thus set out on their discussion of the origin of matter with a presumption in favor of a principle *omne materiale e materiali* just as today we set out on the discussion of the origin of life with a presumption in favor of the principle *omne vivum e vivo*.

It is my purpose to show that in their attempts to solve the problem mediaeval Jewish philosophers resorted to hypotheses which logically stand in the same relation to the problem of the origin of matter as the various hypotheses offered today stand in relation to the problem of the origin of life.

The first hypothesis found in Jewish philosophic literature in explanation of the origin of matter may be called ahylogenesis, and we may consider it as the counterpart of the modern hypothesis of abiogenesis advanced in explanation of the origin of life. It is a bold statement to the effect that a certain portion of the divine spiritual essence was converted directly into matter out of which the world was formed. This view is reproduced by Saadia [3] as one of the thirteen theories of creation which he had gathered from various sources, non-Jewish as well as Jewish. What was the particular source of this view cannot be definitely determined. While on the whole it resembles the general theory of emanation insofar as it traces matter to the divine essence, denying on the one hand creation *ex nihilo* and on the other the independent existence of an eternal matter, it differs from emanation on two important points. In the first place, in emanation matter is an overflow of the totality of the divine essence, whereas in this view it is the transformation of only part of the essence.[4] In the second place, in emanation the procession of matter from God is indirect and remote, whereas according to this view it is direct and immediate. It is not impossible, however, that in the many theories of emanation, which are much older than Plotinus and which are to be found in sources outside the *Enneads*, there must have been one version which made matter arise directly from a part of the divine essence. The existence of such a view is reflected in the arguments of Christian theologians, such as Tertullian [5] and Augustine,[6] who argue explicitly against a view that the world like the Logos was created directly out of a part of the divine essence.

A second hypothesis advanced in Jewish philosophic literature is Alfarabi's version of Plotinus's theory of emanation.[7] In this new version an effort is especially made to furnish a rational ground for the process of emanation which Plotinus himself failed to supply. The interposition of an Intelligence as a first emanation between God and matter, it must have been felt, could hardly solve the difficulty, for, after all, if there is nothing more in the Intelligence than there is in God and if matter emanates from the Intelligence, it must ultimately be derived either from God or from some source outside of God. To say that the further an emanation is removed from God the less perfect it becomes and so that in the end it becomes matter is tantamount to saying that given a sufficient interval matter will somehow make its appearance. In his new version Alfarabi tries to solve the difficulty by maintaining that in the process of emanation a new cause appears which is directly responsible for the rise of matter. This new cause does not proceed from God nor does it come from without, but is the concomitant of a new relation which, not present in God, appears in the first Intelligence by the very nature of its being an emanation. Formally, this new version of the theory of emanation is stated as follows: There is God who is necessary existence by his own nature and whose object of thought is his own self. The product of his thought is an Intelligence. This Intelligence, having a cause for its existence, is only possible by its own nature, but inasmuch as it is the necessary product of God's thinking, it is necessary by virtue of its cause. Thus a duality appears in the nature of the First Intelligence owing to its relation to God as effect to cause. And a similar duality appears also in its object of thought. Its thinking of God, who is necessary existence, produces another Intelligence; its thinking of itself, which is possible existence, produces matter, or more correctly, a sphere. In analogy to the modern explanation of the origin of life by what is known as emergent evolution we may call this explanation of the origin of matter emergent emanation. It says in effect that matter is not the resultant of spiritual causes, but rather an emergent, arising as something unpredictable out of a new relation which makes its appearance in the first emanated Intelligence.

A third hypothesis for the rise of matter out of God is advanced by Ibn Gabirol in his introduction of Will as a factor in the process of emanation.[8] What is the exact nature of that Will is hard to determine. His own statements on this point are rather vague and indecisive. From remote historical analogies, such as Philo's Logos, with which Ibn Gabirol probably was unacquainted, one would be tempted to interpret Ibn Gabirol's Will as a sort of intermediary or instrument. But a parallel statement in the Encyclopedia of the Ihwan al-Safa,[9] by which work Ibn Gabirol was undoubtedly influenced, would seem to indicate that the Will in Ibn Gabirol is to be taken not as an intermediary or instrument but rather as a divine attribute. Corroboration for this view may also be obtained from the discussion of volitional emanation in subsequent Jewish philosophy,[10] though the name of Ibn Gabirol is not directly mentioned. The introduction of Will does for emanation what the various types of vitalism do for evolution. It renders emanation teleological instead of its being purely mechanical, intelligently creative instead of blindly causative; it transforms a necessary process into a free activity. For will implies design, according to Jewish philosophers, which two terms are coupled together by them. As an explanation of the rise of matter volitional emanation is not a device invented *ad hoc* but rather the application of a generally established principle. According to the accepted theories of causality there is a well-recognized distinction between an agent acting by necessity and one acting by design. In the case of the former a simple cause can only produce a simple effect. In the case of the latter, "a single agent that acts with design and will, and not merely by the force of the laws of nature, can produce different effects."[11] By assuming such a volitional agent, Ibn Gabirol is thus enabled radically to change the accepted theory of emanation. It was no longer necessary for him, as it was for Plotinus and Alfarabi, to make the Intelligences pure forms. Quite the contrary, to him the Intelligences themselves are composed of matter and form.[12]

These three hypotheses which I have enumerated with regard to the origin of matter are subjected to a searching criticism by Maimonides. Against the view which we have chosen to call ahylogenesis he invokes the generally accepted proposition that there must be some relation between cause and effect, that quality cannot be the origin of quantity, nor quantity of quality, that a form cannot emanate from matter, nor matter from form.[13] Against emergent emanation he argues that, while it is sufficient to explain the origin of a simple matter, it fails to account for the origin of the variety and multiplicity of material substances. For emergent emanation, argues Maimonides, is still a necessary process. What it does is simply to introduce a new additional cause which, again, acts by necessity. While this new cause could indeed produce one simple matter, the question still remains how could it produce the sphere, and fixed stars within the sphere, the luminous and non-luminous stars and also the other bodies, each of which has its own matter and its own form.[14] Equally unacceptable to Maimonides is volitional emanation. To say that the process of emanation is both eternal and volitional, he argues, is a contradiction of terms.[15] Will means action arrived at by decision after a process of deliberation in order to attain a certain desiderated object. "The true essence of the will of a being is simply the faculty of conceiving a desire at one time and not conceiving it at another."[16] If, therefore, the world is assumed to be an act of divine Will, it cannot be eternal nor an emanation from the divine essence, it must be a creation in time and *ex nihilo*.

In opposition to Maimonides, though not directly answering him, is the view of Crescas. In the first place, he argues that the essence of will is not delayed action but rather purposive action. Given therefore an agent whose purpose is contained within himself and whose means of attaining that purpose are not determined by external circumstance, and you can have eternal action which is also volitional.[17] In the second place, Crescas boldly denies the distinction between creation *ex nihilo* and emanation from the divine essence — a distinction which has been tacitly assumed in Jewish philosophy and openly maintained in Christian theology ever since the Arian controversies. Creation *ex nihilo*, he argues, is a negative term, meaning simply a denial of creation from an eternal matter; on its positive side, it means nothing but emanation from the divine essence.[18]

The inherent difficulties of emanation brought about a revival in Jewish philosophy of the view that matter has an independent origin, having existed from eternity alongside of, and apart from, God. Compared again to the modern theories as to the origin of life this view may be considered analogous to the theory advanced by Lord Kelvin and Helmholtz that life has an independent origin having come down to our earth from other cosmic bodies, where, presumably, it must have existed from eternity. The chief exponent of this view in Jewish philosophy is Gersonides, in the fourteenth century, but it had many followers before him. It is generally assumed that this view was introduced into Judaism from Greek philosophy, under the influence of Plato, and the attempt to reconcile it with the Biblical account of creation is a species of theological rationalization. I think, however, that it can be shown that the belief in the eternity of a formless matter, or chaos, is the survival of an early native Jewish tradition and that it reflects more truly the original meaning of the first verses of Genesis than the belief in creation *ex nihilo*, which is undoubtedly a later development. The stock argument against the assumption of an eternal matter, in both Jewish and Christian theology,[19] is that it would be a second God, equalling God in his chief attribute of eternity. Gersonides, in answering this difficulty, argues that even by denying eternity as the unique attribute of God, God could still maintain his character as a deity by virtue of his power over the eternal formless matter.[20] But to this Crescas rejoins, as follows: To assume first an eternal matter independent of God and then to make it subservient to God's action is purely arbitrary.[21]

This, in brief, is a summary of the various solutions offered in

Jewish philosophy for the problem of the origin of matter. Its analogy to the modern problem of the origin of life, I believe, has been fully established. As against abiogenesis we have ahylogenesis. As against emergent evolution we have emergent emanation. Corresponding to vitalism we have volitional emanation, and corresponding to the theory of the extraneous origin of life we have the theory of the extraneous origin of matter. The chief difficulty of emanation, as we have seen, arose from the assumption of a contrast between God and the world as between pure spirit and matter and of the existence of a causal relation between them. To minds more daring two new alternative solutions would probably have suggested themselves, namely, the obliteration of that contrast between God and the world, either by denying the materiality of the world or by denying the immateriality of God. While the former solution does nowhere occur in Jewish philosophy, the latter was one of the youthful heresies of Spinoza which in time became the keynote of his system. The starting point of Spinoza's philosophy is the rejection of creation in any sense whatsoever. The opening chapters of his *Short Treatise* and the first six propositions of his *Ethics* is a revision of the mediaeval discussion of theory of emanation and a criticism of the futile attempts to explain the derivation of a material world from a God who is pure thought.[22] By force of the internal difficulties of emanation, of which the mediaevals themselves were not aware, Spinoza was led to the conclusion that God is not thought of which matter, or extension, is an emanation but rather a substance of which both extension and thought are attributes.

NOTES

[1] Cf. Maimonides, *Moreh Nebukim* II, 12.
[2] Cf. *Ibid.* II, 22.
[3] Cf. *Emunot ve-Deot* I, 2, Third View.
[4] Cf. J. Guttmann, *Die Religionsphilosophie des Saadia*, p. 49 f.
[5] *Adversus Hermogenem*, ch. 2.
[6] *De Natura Boni contra Manichoes*, ch. 27.
[7] See, e.g., Abraham ibn Daud, *Emunah Ramah* II, iv, 3, and Maimonides, *Moreh Nebukim* II, 22.
[8] *Fons Vitae* I, 7.
[9] F. Dieterici, *Die Lehre von der Weltseele*, p. 131.
[10] *Moreh Nebukim* II, 21.
[11] *Moreh Nebukim* II, 22.
[12] *Fons Vitae* IV, 1; II, 13.
[13] *Moreh Nebukim* II, 22.
[14] *Moreh Nebukim* II, 22.
[15] *Ibid.* II, 21.
[16] *Ibid.* II, 18.

[17] *Or Adonai* III, i, 5, Vienna edition f. 69a.

[18] *Ibid.*

[19] Cf. Tertullian, *Adversus Hermogenem*, ch. 4.

[20] *Milhamot Adonai* VI, i, 18, Third Doubt.

[21] *Or Adonai* III, i, 4, f. 68a.

[22] Cf. my paper "Spinoza on the Unity of Substance" in *Chronicon Spinozanum* II.

SECTION 3

Time: Thursday, September 16, 9.30 A.M.
Place: Gore Hall Common Room
Subject: Mediaeval and Modern Philosophy
Chairmen: G. WATTS CUNNINGHAM, Texas
J. A. LEIGHTON, Ohio State

ISMAĪL HAKKI

MEHMED ALI AYNI
(*Constantinople*)

FROM the various works of Ismaīl Hakki, we see that he is above all an interpreter of the Koran. *Rouh-ul-Beyan*, a work contained in six large volumes, is reason enough for giving him this title. While one cannot say that *Rouh-ul-Beyan* is an original work when compared with hundreds of previous commentaries on the Koran, still, estimated without bias, this work of Ismaīl Hakki is a great triumph and does honor to Turkish national literature. Moreover, it has the advantage of being both a collection of comments and a summary of allegorical and mystical interpretations of many of the verses.

In many parts of *Rouh-ul-Beyan* we find statements which are unmistakably of the Middle Ages. One may refute them easily. But these weak and debatable points belong not to him but rather to his time. We know that in this period history had not been enriched by discoveries made in recent years in Egypt, Assyria, and Babylonia. For that reason the historical parts of *Rouh-ul-Beyan* are weak. But it should be understood that we do not go to this commentary for historical information.

In the list of Ismaīl Hakki's works are to be found many titles on Moslem law and tradition. His principal works are moral and esoteric. But instead of listing his writings here, I shall give summaries and extracts from their pages to assist us in forming an exact opinion of their value and spiritual character.

We know how people in the Middle Ages classified the sciences. The classification of Ismaīl Hakki does not differ very much from theirs, but it has one interesting peculiarity. According to him, knowledge is the essential quality of God, as ignorance is the essential quality of man. Everybody is the servant of God. The servant is the slave of his master. To educate a slave is an obligation of the master. For this purpose God has been manifested to us by science and revealed by his attributes and acts to us his servants in accordance with our capacity. This knowledge is a chain between the creator and his creatures.

There are two glories for science. The one is essential and the other accidental. The essential glory is that quality which leads one to the truth of the known object and dissipates ignorance, doubts, and prejudices relative to that object. The accidental glory of science arises from the matters of which it treats. Since certain matters are more esteemed than others, certain sciences ought naturally to be more valuable than others.

Revealed science needs no effort for its acquisition. Therefore in the hierarchy of sciences the knowledge of God is preëminently science. Acquired science demands effort. This science has no limits, it increases eternally. Next in rank comes rational and dialectic science. This science is scholastic, and is limited because man's reason is weak. The distinguishing characteristic of revealed science is that it cannot be proved by intellectual processes, but must be accepted through faith alone. This we call the knowledge of God. But such knowledge does not include that of the divine essence.

From another point of view, there are three degrees of knowledge. 1. — That which is derived from proofs and experiences. One may not doubt it and contest its truth. If it could be questioned, it would not deserve the name of science. Therefore people say that it is certain, for certitude consists merely in the constancy and the permanency of knowledge in the mind. 2. — The second degree of knowledge is that derived from initiation and ecstasy. That is certitude itself. 3. — The third degree of knowledge is the heart, and it is the essence of the second.

Any one possessed of all the sciences but ignorant of how they lead man toward the truth, will have cultivated his mind unnecessarily and will be deprived of the one universal aim of all aims.

In every science, above all, in geometry, arithmetic, and logic, there are times when truth manifests itself directly. The blame of fanatical critics directed against people possessing these sciences springs from their ignorance; and is caused by their superficial visualization of things.

It is the duty of the scientist to produce a science, for this is his alms, which he ought to offer to the deserving. Since science and wisdom are like diamonds, it is not right to hang them upon the necks of hogs or to throw them on the dung-heap. Furthermore, the scientist must expect nothing from his disciples as a reward for instruction.

All knowledge is achieved by way of reminiscence. We do not begin to learn but we begin to remember. In the various stages of evolution, previous knowledge has fallen into forgetfulness. For this reason it is fitting that we should heed the divine exhortation: Awake!

It is necessary to know that being and spirit are one and the same thing. But one says "being" when one thinks of its manifestation, and "spirit" when one considers its inner intimate reality. Indeed, the absolute does not allow of these two categories, since their use is only for the purpose of clarity, and since determination and indetermination have no meaning as applied to the True. In fact, determination and indetermination are methods either of reason or of intuition, and neither reason nor intuition can contain the divine essence. Therefore the perfect Saints have declared that no name can be found adequate to convey the idea of God. The special name "Allah" (God) only designates certain divine attributes of necessary being. As for us, we cannot comprehend the divine essence, since only the True may know the True. In teaching, one has recourse to determination and here only in order to point out the degrees of being, and to make truth understood. To determine is to distinguish one thing from another, whether in thought, or in reality, adopting certain attributes or qualities as fundamental criteria.

The highest degree of divine determination is the divine entity to which one gives the name of absolute Truth. It is from this that all beings draw their growth. By making use of the idea of a fixed beginning one says things were thus or thus in pre-eternity. The term pre-eternity only means that he has no beginning.

EXTRACT FROM THE "BOOK OF CONSEQUENCE"

Tolerance

"The consequence of an effective knowledge of God is the quality of indulgence. This quality consists essentially in not overemphasizing the faults inevitably found in all created things.

"One must rather seek and contemplate in creation the names and attributes of God who manifests Himself there. For this reason an initiated being must treat the world with veneration, and his own person with severity, because his soul must be controlled. He must examine the faults of his soul and work to correct them.

Finally, he must analyze himself without pity, reserving his indulgence for others. When one is told to regard his soul as a steed, the advice is good, meaning that one must treat it with moderation. It does not mean that the soul must not be corrected. For example, the owner of a steed, after feeding it, mounts and rides, using the whip if necessary. If he lets it follow its own inclination it does not go forward. Hence it must be trained until it becomes docile. Also, in order that it may not fall under its burden, and that it may arrive at its destination, one does not overload it. In this way the soul is like a steed."

Extract from "Kitab el Nedjat"

(*Book of Delivery*)

Inspiration of the Morning

"The order of the world is grounded upon four principles. Of these Science takes the first rank, because it results from the use of intelligence or intuition. The most noble quality of man is intelligence, and science is the most sublime attribute of God. We do not speak of intelligence as a quality of God, since intelligence is creation and is an attribute essentially divine and issuing from divine science.

"Science is also an attribute of man, but not his essential quality. One becomes a scientist only by reason of manifestation of the divine science which is incorporated in him. In short, science is inherent and proper to God. Science which manifests itself in man is also divine science, but there is no contradiction here. In the same way one says 'the human soul,' although the divine character of the soul must be apparent to all.

"With the other divine attributes as well we must bear in mind the secret truth hidden in the popular maxim: 'that each thing be fixed in the place it deserves.'[1] Those who act upon this truth are very rare, for most of us have not been able to rid ourselves of the earthly attributes. And according to this idea the elimination of earthly attributes is necessary for unity with God. So, since your spirit is a part of the Divine Spirit, although you remain an individual, your perfections belong to God too. Really people would be in the wrong in attributing them to themselves. It is enough for you to understand the mystery of reality and to distinguish between unity (with God) and differentiation (from Him). You must see yourself as yourself, and not say 'He is I' and 'I am He.'

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[1] This maxim is the Turkish equivalent for "Render unto Caesar the things that are Caesar's, and to God, the things that are God's."

"You must understand this thoroughly, for it is a profound truth. After all, before the creation of man the World was without soul and as if dead. It was also without intelligence and without knowledge. It was on the level of the beast.

"The second principle is that of justice; it consists in putting each thing in its allotted place, causing order to reign, and creating harmony in all things. The opposite of justice is cruelty. For instance, if the constituent elements of man are without harmony, they are not susceptible of combination. In the same way, if there were no harmony between the various parts of the heavens, the universe would not be well ordered as it is now, both quantitatively and qualitatively. Also, if the moods and temperament of man were not ordered, health would suffer. Therefore, moderation is a good and desirable thing, since it serves health and it is necessary for the assurance of the present and the future life.

"Earthly life and future life are dependent upon order and harmony between all parts of the Universe. Therefore justice is the basis on which they stand. . . .

"The happiness and the prosperity of subjects calls for justice, as ritual prayers depend upon the health of the body; the fecundity and the wealth of the world depend upon order among the people. The health of the body depends upon the temperament and the natural faculties of the body. Now the faculties of the soul are like the subjects of a prince, and consequently the earthly fruits of any body depend upon harmony among the faculties of the soul.

"The third principle is the physician, or rather that which is typified by him; he watches over bodily sickness. This is essential to the order of the world since continued physical indisposition results in the non-observance of religious duties. For this purpose the sciences are divided into those of the body and those of religion. The preference has fallen upon the first. The treatment of disease is customary and traditional with prophets, because healing is not opposed to resignation but rather he who neglects the means of being treated is placed among the foolish.

"The fourth principle is philosophy. Here we refer to the enlightened philosophers who lead their adepts to complete union, and who respect the laws of religion, according to their meaning both apparent and hidden.

"In a town, the presence of these philosophers is as necessary as that of judges, governors, scientists, and of rivers. Now classical scientists do not know the psychology of man. They are useless like the physician, who does not first diagnose the disease of his patient. They cannot treat the diseases of the soul. In consequence the order of the World needs philosophy as well as science, justice, and medicine."

NEO-SCHOLASTIC EPISTEMOLOGY

Léon Noël
(*Louvain*)

THE neo-scholastic movement is not primarily a movement in historical studies. It aims at no archaeological reconstitution of mediaeval philosophy, but rather attempts to make that philosophy functional in the world of today. Even if we wished, we could not utilize the whole of scholastic thought. A certain liberty of choice is necessary.

Why do we return to the scholastics? It seems to me that American philosophers are best prepared to understand our reasons. During the last fifteen years America has seen the growth of schools whose purpose is to introduce coöperation in philosophy. Philosophical reflection is too difficult and too complex for an isolated mind. It cannot succeed without mutual control and coördinated endeavor.

Now it is precisely this coöperant spirit which has been the outstanding character of scholastic philosophy. For centuries, with wonderful self-denial, thousands of the best European minds have brought their contribution to the rearing of this vast edifice of knowledge. We do not say that the building is without defects, but we do say that it contains valuable treasures which are worthy of our attention and which cannot be passed over without loss.

Evidently, the problems of modern philosophy are not the same as those which engaged the attention of the mediaeval mind. The style and the method of treatment have changed entirely. Some doctrines of the past must doubtless be abandoned. But granting that, there still remains a whole system of fundamental principles which have been passed on from one generation to another, each correcting, adjusting, and coördinating the theses passed on to it, until a perfect equilibrium was established. Of that equilibrium St. Thomas gives the most finished formula. We do not neglect the other scholastic philosophers, but we do draw our inspirations principally from him, to such an extent that neo-scholasticism and neo-Thomism can be said to be practically synonymous.

The method of neo-scholasticism has been clearly summarized in the following formula: the problems considered are the problems of today, the solution of these problems is found in traditional principles, rethought as functions of the present.

I could not treat in this short paper all those questions where neo-scholastics believe that the traditional doctrine may forward our contemporary discussions. I will limit my communication to some suggestions concerning the epistemological problem. Is the critical problem a legitimate one? The disciples of tradition have been for some time divided on this point. Many of them thought that true loyalty to the spirit of ancient philosophy obliged them to answer in the negative. It was one of the most important achievements of my master, Cardinal Mercier, that he organized a scholastic treatment of this critical problem. His position was widely discussed amongst the Thomists, but the main outlines he sketched are more and more obtaining a widespread acceptance. Such, at any rate, was the impression I received at the International Thomistic Congress held in Rome last year.

Our solution agrees very closely with the ideas proposed in recent times by the various realist and objectivist schools. Permit me to outline some of its peculiar features.

When the reaction against Idealism began, there arose a tendency to minimize the importance given to epistemology during three centuries of modern thought. We saw Mr. Marvin advocating "the emancipation of metaphysics from epistemology" and using the old word "dogmatism" to characterize the methodological attitude he adopted against modern criticism. Many other writers, in like manner, turned their backs on the critical problem, and devoted themselves rather to what is now called the phenomenology of knowledge. The school of Husserl, for example, is so absorbed in such an analysis that it seems to have lost all interest in reality.

The traditional spirit does not lead us in that direction. It is true that the ancients did not treat the critical problem either expressly or systematically, but this is because they did not know the difficulties presented in our day. Nevertheless, they conceived quite well the general outlines of an epistemology. It is also true that they did not present their epistemological doctrine at the very entrance to philosophy. They did not need, as we do, the explicit and progressive process of thinking which Descartes initiated. It is our task as neo-Thomists to formulate explicitly the notions which lay implicitly at the root of the traditional doctrine, and to arrange these notions in a clear and rigorous order.

Our epistemology is objective and realistic, but we are not satisfied with naïve realism. We take as a technical starting point the universal methodical doubt — *universalem dubitationem* — which appears in Aristotle's *Metaphysics* and in Thomas's *Commentary*, as a condition of sound philosophical thought. Our final statements all proceed from a reflection in which the mind is fully conscious of each of its steps and their whole meaning.

Hence it is that we accept the problem of knowledge in terms of modern philosophy. The Cartesian "cogito" may be brought into striking parallelism with some words of Thomas Aquinas, "*secundum hoc cognoscit veritatem intellectus quod supra se ipsum reflectitur.*"

It is only a truism to say that I cannot know anything about an object unless it be known to me. It is quite as evident that if the object is known to me, it has some relation to my act of knowing. But it does not follow that the object known depends upon that relation. Hence, even though we admit the "cogito" as a starting point we are not thereby committed to idealism.

It must also be observed that this starting point is not chronological. None of us probably remember the first awakening of consciousness, but even so, it is very unlikely that our mental life began by saying "cogito." The *Nicht-Ich*, as Fichte said, is necessary for the *Selbstbewusstsein*, and in saying so he agreed perfectly with St. Thomas, at least in so far as human knowledge is concerned.

But we are not enquiring nor building hypotheses concerning the genetic history of our knowledge. Epistemology is the work of a developed mind, possessing scientific and philosophical as well as popular knowledge, and capable of reflecting on the whole of it.

In the general history of human thought as well as in the private history of an individual mind, such a reflection is introduced by the fact of error and by the divergence which may exist in different minds regarding the same object, or between different moments in the same mind. According to common sense, error consists in the discrepancy between mind and reality, whereas truth consists in the agreement of mind with reality. The cardinal problem of epistemology consists in stating precisely the meaning of these common-sense notions: real, truth, and agreement between mind and the real.

Here we are almost in agreement with the critical realists for whom truth and error imply some distinction between the two terms, knowledge and reality. If there is no distinction, then both truth and error are impossible. Truth appears only when the mind begins to possess, over against reality, something which is its own, and which may be compared with reality. *Ibi primo invenitur ratio veritatis*, says St. Thomas, *ubi intellectus incipit aliquid proprium habere.*

We also admit that truth implies some relation between the mind and the real, a relation of correspondence, of similarity, *adaequatio rei et intellectus.*

Up to this point we agree with Mr. Santayana and the other critical realists. The essential difficulty appears only at this point. How is it possible for us to know that our mind agrees with reality and is similar to it, and describes it correctly? There is no question of comparing our knowledge with an unknown reality, for such a comparison is impossible. Nevertheless the epistemological problem is to be solved from our point of view. There are only two possible issues: either knowledge never attains anything except mental terms, and then there is no comparison whatsoever between the mind and anything outside it, or else the real is attained in some way by a kind of knowledge which does not terminate in mental terms but rather in reality itself, and then comparison is possible.

The notion of immediate and direct realism was admirably restored some years ago by the neo-realist school. When Professor Perry expounded his "epistemological monism," his expression might have been subject to discussion, but the notion he suggested was, in my opinion, a fundamental one in any realistic theory.

Is it not possible to reconcile the points of view of the different realist schools? It seems that they themselves have attempted some reconciliation. The critical realists refuse to be enclosed in a purely dualistic "representationism;" they believe that in some way our knowledge carries us to real things. The neo-realists on the other hand, though denying pure subjectivity, seek for some element they can oppose to things.

We should like to distinguish here two questions; the one epistemological, the other ontological. The epistemological problem interests itself in the value of knowledge attained by reflection, and answers the question: Do I attain reality? The ontological problem interests itself in the mechanics of knowledge and answers the question: How do I attain reality?

From the epistemological point of view, is it possible for a mind which reflects on its acts of knowledge to discover their relation to reality? To make such a reflection possible, it is necessary that two terms should be present in the field of reflection, namely, the real and the mental expression of the real.

In order to understand our question, it is well to recall that for Thomas there is no truth nor error except in judgment. Every judgment implies a comparison between thought and things. It also implies an elementary reflection which makes that comparison and formulates its results. Epistemology has nothing more to do than to resume in explicit and technical terms the very steps of that elementary reflection.

Long ago classical logic stated the terms of judgment, — subject and predicate. But it must not be lost sight of, that in many judgments the subject itself is an abstract term which may function as a predicate in other judgments. When I say, "paper is white," I make a general judgment, the subject of which may become a predicate in another judgment: "this, which I hold in my hand is a sheet of paper." I arrive thus at a primary subject which cannot any more be a predicate and on which, through the more general judgments, the whole series of predicates ultimately reposes.

What is the meaning of the expression "this," "that"? I could just as well use a gesture of my hand and leave out every kind of expression. The primary subject is opposed to all the notions meant by the predicates; it is also opposed to the mental activity which forms the notions and constitutes the judgments. It is at the same time present to the mind and independent of it, dominating it, and offered to it in order to be expressed by it.

The first result of our mental effort is the concept. Isolated, it is neither true nor false, but in a certain sense, neutral. In the act of judgment, it is related to the subject by an affirmation, as corresponding to that subject or representing it, thus giving us the possibilities of truth and error. Independently of the relation formulated in our judgment, there is between the terms — subject and predicate — a relation due to the character of the terms themselves. As a matter of fact, whether or not I formulate that relation matters little. I must formulate it to make a true judgment; it is independent of my act of judgment and rules over the activity of consciousness. All must agree in acknowledging this, under penalty of error.

We may now determine the meaning of objectivity and reality. Objective means the relations subsisting between the terms of the judgments independently of my activity. These relations are imposed on me, and if my judgments are to be true, they should formulate them.

But when I consider the terms themselves, I discover a fundamental difference between all the predicates and the terms we have called primary subjects. The predicates are the result of my effort to express to myself what the subject is; the primary subject precedes every such effort, it being a primitive presence which I passively undergo.

What is it then that we should call real if it is not that datum opposed to my activity? What could we discover that better corresponds to the idea of the non-ego?

But the critical realists do not believe that the immediate data of consciousness are real. Even from the epistemological point of view they consider immediate realism as the result of an insufficient analysis of knowledge. The conscious data, they say, are not the objects. The object is not intuited, it is only known beyond the data by an affirmation. It is revealed by the data, embodied or clothed with them; it is not itself directly given, but only believed or affirmed. The data are "essences," not "things."

In our opinion, and according to tradition, two aspects must be distinguished in the immediate datum which we call the real: the sensible aspect and the intellectual aspect. The sensible data are manifestly relative and transitory, and it is not to be denied that even in perception they are largely conditioned by the subjectivity of the individual knower. If our consciousness terminated in the sensible data, we would not attain the real and the non-ego; rather we should live a kind of subjective dream without being clearly aware of our opposition to things. But are we ever reduced to a pure sensitive consciousness?

There is, intimately united with sensation, another way of knowing, which goes beyond sensation, and this is the intellectual. It does not attain any object besides that of sensation; it finds its object in that of sensation itself. That object is being, or the intelligible aspect of things. It seems to me that being is not "intuited"—it is simply "known" in a non-intuitive way. But it is known immediately. It is neither affirmed nor believed. On the contrary, it is "given" along with the sensible datum. But while the sensible datum is given intuitively, *being* is given through the sensible intuition in a way which is not intuitive.

Later on, the intelligence gets out of the state of passivity in which it is at first united with sensation. At the same time the intelligible object emerges from the sensible datum and we pass from confused to formal and distinct knowledge. *Being* then, is not posited by the intelligence as Fichte thought, rather it is given with the sensible datum with which it is clothed, and from which afterwards it is freed by an effort of the intelligence. Being was at first the concrete being of the sensible reality. It is now abstract being. Meanwhile it becomes more precise. *To be* is, primarily, to exist. This is the common character of every reality. But although everything *is*, there are different ways of being. One being *is*, in not just exactly the same way as another. Existence is coupled with essence, measuring and determining existence. Thus the two aspects of the primitive datum unite. If we had an intellectual intuition of things, we should seize even to the last detail, all the differences which determine them to such and such a being. But our notion of *being* remains vague and indeterminate; intuition is sensation. Nevertheless, what is offered to the senses, filling our eyes with colors and our ears with sound, pressing and warming our skin, that *is*. Being is not beside, nor below, nor above the sensible datum; it is that same reality, pressing and warming, illumining and sounding. It is not indeterminate, but quite determinate and concrete. Only the intelligible formula of its determination escapes us. We conceive that there is such a determination, and while we cannot apprehend it and determine it precisely in the order of intelligible being, we do complete and fill it up with the mental image of those sensible characters which were at first given to us. This notion, more guessed at and sketched, than possessed and achieved, is what Aristotle called τὸ τί ἦν εἶναι and the Scholastics *quod quid erat esse*, or more briefly the *quidditas* of things.

In the concept or *quidditas*, the intelligible object is seized. It corresponds fairly well with the universal and abstract "essence" of the critical realists. On the other hand, as we have seen, it is related to the primary intuition out of which it is extracted by the activity of the mind. We may say that the *quidditas* is referred to the real thing by way of an affirmation, but the affirmation itself is founded on intuition and justified by it. There is some immediate knowledge of the real.

How are we to explain that immediate knowledge? Here we meet the ontological problem. Treated at length in ancient philosophy, suppressed by modern idealism, it revives in every realist theory. If I know only my mental states, there is no ontological problem at all. But if knowledge really attains real things a rather difficult question arises. If the things are real and are distinct from me, how are they present to me? As I am myself, so at the same time, they must be in some way united to me.

Some critical realists, such as Mr. Sellars and Mr. Strong, have clearly seen the problem and seem to incline to the solution given by the old scholastics. The knower has in himself some form of the object known, but it is false to believe, as some do, that the scholastics separated form from matter. Matter and form have no separate existence, but unite in one being. If our knowledge attains the form, it attains the real thing as it is in itself. If beings are isolated and separated one from another, this is due to matter. They may communicate as regards form. Knowledge consists in the possession of the form of the thing known. "*Cognoscens*," says Thomas Aquinas, "*natum est habere formam etiam rei alterius*." Is not this what the critical realists mean when they speak of the form as a universal, "something which is, at the same time, in the object known and in the knowing subject"? But scholastics would not speak simply of the form as a "logical" and universal "essence." The logical essence is objectively contemplated through the concept. It does not explain ontologically how knowledge happens. According to the scholastics we find the real and ontological form of the object in the subject. This form is not itself the object known; the object known is directly and immediately the real being. The form united to the knowing subject is an ontological reality, but a reality which is there only to make knowledge possible and to carry our consciousness to the object. When Mr. Strong says that the psychic state is not itself known, but is the vehicle through which the "essence" is given, we are almost in agreement with him. But we would go even a step further, and make a distinction between the material side of the psychic state and its form. The form has only an "*esse intentionale*" in the subject, and through it, the psychic state is united to the object known.

To explain these notions in full, it would be necessary to enter into a series of metaphysical considerations. Time forbids me to go further. I only wish to indicate that the notion of a spiritual subject, which is to say, a form emerging from matter, lies at the root of the whole theory.

THE NEW SCHOLASTICISM AS A CONTEMPORARY PHILOSOPHY

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THE feeling that there exists no ultimate irreducibility or at least no irreconcilable differences between many of the positions held by contemporary thinkers is a conviction which is both widespread and profound. Professor Bosanquet gave expression to this feeling and sought to prove its worth in his *Meeting of Extremes in Contemporary Philosophy*. For him idealism and realism were not, in any precise connotation of the term, antithetical notions. They were "traditional battle cries and watchwords,"[1] "drapeaux" as he called them, which would resolve themselves into flags of truce and perhaps of peace, if we dared approach differences in thought in "less controversial modes." If we could only be made to forget some of our prejudices we would discover "in the higher walks of thought, modifications of a common basis, rather than a tumbling this way and that between crude contradictories; we would find, too, some fundamental features shared by the group of thinkers most strongly opposed to one another today."[2] In illustration of this thought he was bold enough to grapple with those seeming contradictories, idealism and realism, to conclude that the antitheses between them are more or less illusory.

Thus Bosanquet finds that the new idealism and the new realism fundamentally agree in their recognition of Time as the actual and ultimate reality and of ethical, but non-religious progress as the end of human accomplishment. In spite of this agreement, we must not close our eyes to the fact that although both schools are one on the basic importance of time for metaphysical thinking, they differ in this, that the neo-idealistic conception of time is of a static affair, a mere analysis of eternal happenings, while the new realism views time rather as a dynamic process of the present. The agreement is deeper where the ultimate progressiveness of the universe is concerned and gives to both systems a common naturalistic tendency, resulting in a system of meliorism which is the opposite of and in conflict with religious faith. This is seen perhaps best in Professor Gentile's concept of the Deity when compared with that of Professor Alexander.

That Professor Bosanquet was not altogether successful in finding the extreme where contemporary thought meets is the commonly accepted verdict on his book. This failure, however, does not justify the conclusion that no such middle ground exists or that it is a hopeless task to attempt to disengage the tangled skein of modern thought in order to find the golden thread of truth which runs through all our complex, and oftentimes wayward, thinking. The thesis of this paper is that Bosanquet in turning to monism turned in the wrong direction; that by failing to make certain distinctions forced on us by experience and thought, he lost himself in a maze of irreconcilable difficulties. We shall all probably agree that it is a hopeless and impossible task to attempt to reconcile contradictories one with another. Errors in their extreme expression undoubtedly meet but of what use to thought is such meeting, since the points from which they started are unacceptable?

In as far as the new realism and the new idealism present aspects of thought which are contradictory, they are positions which must simply be rejected. On the other hand, in as far as they contain elements of lasting value for philosophy, we see no reason why by precision of language and by the maintenance of a series of vital differences it should not be possible to resolve both viewpoints into a higher, more substantial, and truer synthesis which, while it rejects the unacceptable doctrines of each, completes their work of analysis by the formulation of a "whole" view in which each element of life, of thought, and of reality finds its correct, necessary, and logical position.

The tendency of absolutism to return to a more realistic attitude is very marked in recent literature. It is this fact which Professor Bosanquet grasped but failed to make use of, at least to the extent of correcting the manifest metaphysical exaggerations of that point of view. The lifeless character of much of what passes as intellectualism has been pointed out again and again, and by no element more vigorously than by the pragmatists. They have shown us that "to treat of knowledge in general," as the absolutist does, and "then to predicate it not of a human but of a supra-human intelligence which manifests and realizes itself in finite centers is to make of human knowledge at bottom but an illusion."[3] Is it not possible to assign a due place to human psychology in the knowledge scheme, a place which will recognize the reality of both thought and things, yet not exaggerate the importance of either by making the universe all subject or all object? What we are searching for is a position which is neither one extreme nor the other but which can be said to embrace the sound points of both systems and succeeds in arriving at a unified construction of thought and reality. We present the new scholasticism as such a philosophy. It is our contention that, if it is fairly expounded and correctly understood, the new scholasticism holds within itself the promise of that higher synthesis for which thinkers have been searching since the days of Hegel.

The essence of this thought may be expressed in a formula which I am pleased to call the "Doctrine of the Two Levels." This doctrine is essentially metaphysical and is to be understood solely in a metaphysical sense. That it should contain within itself or eventuate in a mystical attitude towards reality is very probable but quite outside the strictly metaphysical bounds within which its exposition is here attempted. In origin, at any rate, it has no affinities with any of the so-called Indian philosophies, whatever its outcomes in a religious way may be.

According to the Doctrine of the Two Levels, the universe is not viewed as an organic whole, though it must be accepted as a unity containing within itself differences. That such things as organic wholes, unities in difference, and immanent thoughts exist, as the absolutist contends, is beyond all question. The application, however, of these concepts to the universe is invalid, and particularly false is it to call the universe an organic whole, which assuredly it is not. These concepts cannot be made to transcend finite experience except by an intellectual *tour de force*. When they are erected into metaphysical categories explanatory of the universe as a whole it must be done in defiance of all the facts of human experience.

The universe, however, despite its inherent manifoldness, is a unity towards the achievement of which all the forces contained within it are in constant progression. That this unity is never actually achieved in the absolutist manner of thinking, militates neither against the reality nor the value of such unity. It only proves that the facts of existence, and particularly of human life, are of such a character that they inevitably tend to burst the strait-jacket in which our thinking habitually attempts to confine them. The Doctrine of the Two Levels recognizes that both thought and things exist in the universe and on two levels — one the Level of the Infinite, the other the Level of the Finite. Given these two levels, it is possible to understand why and how we can accept the spiritual and subjective character of thought, and, at the same time, are not forced to deny the reality of change. Again, while admitting the reality of relations, which no one today denies, we find it possible to take a wider view of them than an exclusively psychological one. Granted that each being is a unity and that the whole is conceptually and teleologically, although not existentially real, it is possible to outline the relations of every being to this whole and to every other being within the whole, without assuming that nothing but the whole exists or attempting to explain that a relation is something which somehow connects things which themselves are somehow related to something else from which they in the last analysis in no way differ.

On the upper level — the Level of the Infinite — *Esse* is not *percipi* but rather *percipere;* reality is idea, not partially but totally. Fundamentally this level is monistic and for purposes of exposition may be conceived not longitudinally but spherically, since the Deity as regards space is infinite and as regards time is no less so, making anything like a history of Infinite Mind unthinkable. As Subject, God is Pure Act. Viewed from below, He is not merely "pensiero pensato" but "pensiero pensante." As Unity, He is incapable of potentiality or multiplicity, being by His very nature absolute, necessary, simple, eternal, infinite, and dynamic, the beginning and end of Himself, a law unto Himself. As Truth, there is no place for error in the Infinite; as Good, there is no room for evil. According to the new scholasticism, Absolute Mind is not merely a process of thinking or an act of thought. God is inexpressibly more than an "atto-spirito;" He is Infinite Being, and therefore not to be confused with the merely functional thought existence which Gentile calls God.

According to the new idealism "nothing exists in the mental world; everything becomes."[4] If this were true, God indeed would be immanent in all things, and the distinction between the Level of the Infinite and the Level of the Finite must be wiped out. But at this point we part company with the new idealism. According to our conception, God is immanent to nothing outside Himself. As far as we on the lower level are concerned, He is transcendent not only as regards thought but as regards being. If such is the case, to predicate of the Absolute categories founded on the contingent, the temporal, the spatial, and the relative, categories which make up the very essence of the pluralistic and phenomenal world in which we live, is to involve our thinking in patent contradictions and to render insoluble the problems which the existence and nature of the Deity impose on human thought.

We cannot accept, therefore, that "absolute unity" of Professor Gentile "in which the human is the divine and the divine, human."[5]

We cannot follow the new idealism when it attempts to identify the two levels of Being, and we are in consequence obliged to repudiate most of the conclusions in ethics, art, history, philosophy, and religion drawn from the supposed identity of the divine and human minds.

On the Level of the Finite the new scholasticism is realistic and dualistic, accepting as fundamental the distinction between thought and things, matter and spirit, both in the epistemological and ontological orders. Each "thing" is a unity having in itself differences whose Ground may be said to be the Infinite, not in the sense of immanence but in the sense that all things come from the Infinite. The ground of each thing is in itself, its substance; structural differences are the many modifications substance is constantly subjected to, either because of internal changes in the organism or because of some pressure exerted by a force outside the organism. The world of the Finite Level being pluralistic is made up of minds and mind-independent realities which come into relation one with another by the process called knowledge. In this fashion the spirituality and subjectivity of thought, as well as the objectivity of things and the value of our knowledge are preserved. There is no need, in order to maintain the vital character of human knowledge, to objectify knowledge itself as the new realists do by making "matter and mind consist of the same elemental stuff." [6] If the universe were not made up of finite beings, some organic and some inorganic, some merely sentient and some rational, each one of which is an individual whole, some such theory as that of a "neutral mosaic" might be applicable to the facts at hand. But the facts being what they are, it seems imperatively necessary to face them and to attempt an explanation by a series of postulates in closer harmony with experience.

The acceptance by the new realism of the immediate presence in consciousness of the object known, its respect for the objective value of the truths of logic, its belief in the continuity of both the physical and psychical are doctrines to which every dualist will subscribe. We find ourselves, however, disagreeing violently with its materialistic and monistic tendencies no less than with the consequences of the same, its naturalistic ethics. Bosanquet has noted "how simple and how attractive their attitude to life can be made to appear. You admit that there is duty and happiness, and a world to be made better, it is not necessary to decide how far — and, *voilà tout.*" [7] It need scarcely be added that the new scholasticism is not such a meliorism. It is really a religious, not a moralistic attitude at all, and as such demands a set of religious and ethical values which, because they are founded on a recognition of the Infinite Level, are not only quite different from those propounded by the new realism but are, we believe, precisely because of their religious character, more lasting and efficacious as well.

The Doctrine of the Two Levels, because it is so profoundly dualistic, can never become, we are told, the ultimate explanation of reality. Only some form or other of monism can aspire to such an honor. It is true that we see no way of breaking down the necessary distinction between the two Levels and of merging one into the other. The Upper Level is essentially spiritual, infinite, and as such timeless and spaceless. The Lower Level is partly material and partly spiritual, finite, and as long as the present temporal sequence continues cannot but exhibit a pluralistic character. Is it possible that the Lower Level shall be at some future date entirely absorbed in and by the Infinite? The fact of human personality effectively puts an end to any such possibility. This same fact, however, makes possible a series of relations between the Levels in which relations both human freedom and human personality are able to conserve for mankind what is most valuable in each of them. These relations are of the interaction, or better still, the permeation type in which each being acts or is acted upon with no destruction or diminution of its own individuality. To explain then the relations between the Levels, it is not necessary either to postulate the existence of a "society of spirits" or to conceive of these relations as consequences of a merely psycho-physical or divine-human parallelism. In point of fact, every type of parallelism that has ever been constructed by philosophers is totally inadequate to express the extent of dependence of the finite upon God.

The new scholasticism in its doctrine of the Lower Level closely approximates and can accept much of what pragmatism teaches. In particular, it is very near to pragmatic thought on those points where pragmatism contends as against idealism that thinking is profoundly active, that it is a vital human process, not a mere shadow of what goes on in the Absolute Mind. It separates itself from pragmatism, however, when this latter philosophy attempts to generalize psychological categories beyond the limits to which they are applicable, and, as a consequence, falls into a species of subjectivism no less disastrous than that of Kant.

It would scarcely be fair to conclude from this fragmentary exposition of the new scholasticism that we, like the honeybee, flit from flower to flower of modern philosophy with the purpose of extracting from each its own proper flavor and building the results of our labors into a new and wondrous product. The new scholasticism is, in no sense of the word, a philosophical eclecticism or a harmonizing metaphysics. It has its own systematic principles, its own assumptions and postulates. These we are constantly striving to understand better and to develop more fully. In their application to current problems, we find much to learn from present-day systems of thought, both as regards emphasis and as regards demonstration.

It is in the extreme conclusions which flow from many contemporary philosophies that we discover both the value and the weaknesses of their underlying principles. It is by refining some of these conclusions and by rejecting others, it is by re-interpreting theories in the light of our own principles that we are led to the conclusion that the new scholasticism is the only meeting ground where what is best and most valuable in contemporary thought can encounter the ancient philosophy, can come to know it, and can be bettered by the acquaintance.

NOTES

[1] *Meeting of Extremes in Contemporary Philosophy*, p. v.
[2] *Idem*, p. x.
[3] Walker, *Theories of Knowledge*, p. 654.
[4] Gentile, *Sistema di Logica*, Vol. II, p. 60.
[5] *Teoria Generale dello Spirito come Atto Puro*, p. 271.
[6] Holt, *Concept of Consciousness*, p. 128.
[7] *Meeting of Extremes in Contemporary Philosophy*, p. 186.

JOHN LOCKE AND SAMUEL CLARKE: 200 UNPUBLISHED LETTERS

(Abstract only)

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THIS unpublished correspondence between the philosopher John Locke and the parliamentarian Edward Clarke covers uninterruptedly the period from 1682 to Locke's death. The nearly two hundred letters of Locke belonged formerly to the Nynehead Collection; and the letters of Clarke, his wife and daughter still form part of the Lovelace Collection.

These letters present with much richness of detail personal and social traits of the philosopher. They are replete with information upon his private and financial affairs. They contain the original draft of his *Treatise on Education*. The successive steps taken by Locke to secure through the agency of Clarke reform in monetary legislation are more minutely described than in any existing publication.

The chief interest of the correspondence to philosophers naturally lies in new light thrown upon the origin and growth of Locke's *Essay* in regard to which the philosopher kept Clarke fully posted during his sojourn in Holland. It must suffice here only to mention that the date of the accidental discussion which set Locke upon his "enquiry" is given by him as ten years later than that ordinarily accepted.

LA PHILOSOPHIE D'OCTAVE HAMELIN

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OCTAVE HAMELIN est mort, victime d'un acte de dévouement, à 51 ans en 1907. Il avait publié seulement quelques articles sur l'histoire de la philosophie ancienne ou moderne, sur l'induction, sur le raisonnement par analogie, lorsque parurent, moins de cinq mois avant sa mort, les deux livres qu'il présentait à la Sorbonne pour le doctorat ès lettres: une traduction avec commentaire du livre II de la *Physique* d'Aristote et un *Essai sur les éléments principaux de la Représentation*. Sous ce dernier titre, si modeste, il y avait en réalité un système et une méthode, la méditation de toute une vie, la condensation de trente années d'études et de réflexions sur tous les moments et tous les problèmes de la philosophie. Seule, la difficulté qu'éprouvait Hamelin à se satisfaire avait retardé d'année en année l'achèvement d'une œuvre qui ne lui semblait jamais être au point, dont il parle lui-même, dans ses dernières lignes, comme d' « une esquisse grossière et misérablement fautive. » Mais ceux qui connaissent l'homme, qui savaient ce qu'avait été l'élaboration de son livre, n'avaient pas de doute sur la valeur de ce qu'il apportait, sur les riches virtualités d'action qui devaient résulter pour la philosophie française de cette révélation d'une pensée qui s'était si longtemps cachée.

C'était surtout chez les élèves d'Hamelin que cette certitude était la plus enthousiaste. Ils avaient en effet vu leur maître, à l'Université de Bordeaux où il professa pendant dix-huit ans, puis à Paris dans son enseignement de l'École normale supérieure et de la Sorbonne, travailler et réfléchir pour eux et sous leurs yeux. Dans l'explication des textes classiques de la philosophie s'affirmaient, avec l'étendue et la sûreté de son savoir technique, la force et la pénétration incomparables de la pensée critique. Il avait surtout approfondi Aristote et Kant, mais aucun domaine de l'histoire de la philosophie ne lui était étranger. Des cours professés par lui sur Aristote et sur Descartes ont été publiés par mes soins après sa mort: on peut discuter ses interprétations; on n'en peut contester la substructure solide, ni surtout la forte originalité et la féconde richesse. Cet enseignement, en fournissant parfois au maître une occasion de lever un coin du voile qui couvrait ses méditations, était une révélation partielle de ce qu'en pourrait être un jour l'épanouissement en doctrine. C'est pourquoi, avant d'avoir donné au public sa philosophie, Hamelin était déjà un philosophe célèbre: ses élèves, dont j'ai été, se déclaraient en effet passionnément attachés à lui par l'admiration et la gratitude. Après trente-sept ans, ces sentiments sont en moi aussi puissants que jadis; ce sont eux qui me déterminent à tenter de vous dire en quelque mots pourquoi je souhaite de voir sa doctrine plus connue et toujours mieux étudiée.

Par sa formation personnelle Hamelin se rattache au Néocriticisme de Renouvier, à la mémoire de qui l'*Essai* est dédié. Mais il l'a prolongé et développé; peut-être même en a-t-il profondément modifié l'esprit. L'idée fondamentale de sa doctrine est que le savoir est systématique et que, par suite, il doit être possible de constituer la pensée, de construire la représentation. Sa doctrine veut donc s'opposer à la fois, et à l'empirisme en affirmant que le savoir est un système, et au formalisme en affirmant que le contenu du savoir n'est pas une matière reçue et, en fin de compte, inconnaissable. D'autre part, la méthode à suivre ne saurait être la méthode analytique; car cette méthode, ou bien suppose des synthèses qui en limitent le pouvoir, ou bien, si elle prétend se suffire à elle-même, aboutit à l'unité éléatique et à la négation du complexe. La construction du savoir se fera donc suivant une méthode synthétique et progressive qui, au lieu de développer seulement des notions, montrera en action le passage d'une notion à une autre. Or le moment décisif de cette méthode est l'opposition: non pas une opposition absolue comme est celle des contradictoires, car alors la synthèse semble impossible entre le posé et un opposé qui en est la négation; mais une opposition relative, réelle comme celle de deux contraires qui, pareillement réels, s'appellent l'un l'autre, exigeant ainsi une conciliation qui traduit le progrès de la pensée du moins complexe vers le plus complexe. Grâce à cette nécessité primitive de la pensée on sauvegardera à la fois, et l'essentielle diversité du savoir, et son caractère essentiellement systématique. Comment la méthode synthétique a pris peu à peu conscience d'elle-même, Hamelin le dit dans quelques pages d'une précision et d'une sobriété magistrales. Il y définit notamment sa conception par rapport à Fichte et surtout par rapport à Hegel. Pour ce dernier, la thèse et l'antithèse révèlent la contradiction inhérente au fini et en faisant évanouir les limitations qui individualisent, le mouvement dialectique va vers l'infini et vers l'universel, vers l'universel concret qui est l'Esprit. Mais dans l'Esprit de la philosophie hégélienne Hamelin ne trouve que l'Un absolu et indéterminé, quelque chose qui est au-dessus de la conscience parcequ'il est au-dessus du fini. Or ce que, lui, il veut essayer, c'est au contraire une philosophie du fini, une philosophie de l'entendement et « qui saurait bien où elle va. » Si cette philosophie « atteignait le concret vraiment concret et l'être par soi; si en outre elle introduisait, avec la contingence et la liberté, mises à leur place d'ailleurs et limitées, quelque chose de personnel et de moral, . . . elle satisferait la raison et, au besoin, la conscience chrétienne tout autrement que le système hégélien. » (p. 37, de la 2^{e} éd.) C'est que, chez Hamelin, les opposés que la synthèse concilie ne sont plus la négation l'un de l'autre: ils sont des corrélatifs, dont chacun pris à part est seulement incomplet, et qui ne se complètent que par des affirmations, « dont la dernière, totalement différente du néant de la *théologie négative*, sera l'être achevé et intégralement défini, » c'est à dire Dieu.

Dès lors, la construction de la représentation, suivant une sorte de progrès organique, par l'assemblage de ses « éléments principaux, » doit prendre son point de départ dans la *relation*, laquelle consiste justement à unir des opposés qui ne s'excluent pas: c'est là le fait primitif. Mais cette impuissance d'être l'un sans l'autre, qui caractérise la relation, appelle son opposé, qui est encore un rapport, la nécessité d'être l'un sans l'autre, de compter à part l'un de l'autre: c'est le *nombre*, totalité où s'unissent unité et pluralité. À son tour, la synthèse de la relation et du nombre donne naissance au *temps*, qui est à la fois liaison et exclusion progressives des parties les unes par les autres. Cependant cette progressivité, en vertu de laquelle la série temporelle est irréversible, exige comme antithèse un autre ordre, où les parties, ne s'excluant qu'en un certain sens, donnent lieu à des séries multiples, simultanées et réversibles: voilà l'*espace*. La synthèse du temps et de l'espace, c'est le *mouvement*. Ainsi, en même temps que chaque notion est une synthèse, deux notions, dont l'une est l'antithèse de l'autre, s'unissent en une notion nouvelle, qui à son tour fournit sa thèse à un nouveau groupe ternaire. Or temps, espace, mouvement sont des continus et des composés. Ils appellent donc un indivisible, qui soit quelque chose de plus concret qu'eux; en face de la quantité, la *qualité*. En opposant maintenant la qualité au mouvement, ou à ce qu'Hamelin appelle, d'une vieille dénomination aristotélicienne, l'*altération*, c'est à dire le devenir de la qualité, sa persistance, sa dénaturation, ses transformations. Mais ce développement de la qualité, avec ses moments isolés, c'était « une histoire »; si pourtant le savoir est un système, ces moments demanderont à être rassemblés et groupés dans un ordre statique. Or, avec la *spécification*, pour l'appeler par son nom, une donnée qualitative est comme située; au milieu de choses qui s'altèrent elle reste stable, et c'est un grand pas vers la constitution d'un monde. Cette permanence, toutefois, ne signifie qu'un moment de la représentation. Après avoir été appelée par le devenir, voici que, de nouveau elle exige le devenir. Synthèse de l'altération et de la spécification, la *causalité* représente en effet un ordre supérieur, tel que « les parties de l'espace et du temps qualifiés se commandent les unes aux autres leurs stabilités et changements corrélatifs » (p. 224); car son originalité, c'est qu'elle rend compte à la fois, et de la conservation de quelque chose, et de l'apparition de quelque chose de nouveau. Elle contient cependant un élément en quelque sorte négatif, qui s'exprime par le mécanisme. Or cette limitation même fournit une amorce et un point d'attache pour un novel élément de la représentation: avec la *finalité*, les phénomènes ne seront plus seulement des résultats; leur déterminisme, encore incomplet et trop peu concret, s'achève par l'idée d'un ordre qui n'est plus simplement de composition ou de succession, mais orienté vers des fins et qui constitue un système. Il faut maintenant une synthèse de la causalité et de la finalité. Mais, tandis que chacune des relations précédentes ne progressait vers le concret qu'en s'appuyant sur une relation supérieure, la relation en face de laquelle on se trouve à présent doit se suffire à elle-même, être « un système agissant, » ayant intrinsèquement pour caractère d'être un rapport de soi, avec soi. Or, pour Hamelin, « manifester son indépendance et sa suffisance par un caractère interne, c'est se faire, ou posséder la liberté » (p. 356). La *conscience*, le « pour soi » est la synthèse dernière, le moment le plus haut de la réalité, celui par lequel le connaître se place au cœur même de l'être. Elle est aussi la synthèse totale, car les notions inférieures à la conscience et, enfin, la conscience sont des degrés d'une même hiérarchie. De la relation jusqu'à la finalité, elles constituent les premières articulations d'une sorte de « preuve ontologique, » qui, synthétiquement sans doute, mais non moins rationnellement, progresse jusqu'au moment où l'être concret, pleinement réel, se pose dans et par un acte libre et entre ainsi en possession de soi-même (p. 434 sq.). L'être, c'est donc l'esprit, l'esprit en tant que conscience, et la réalite première, Dieu, c'est l'esprit absolu qui a voulu être la bonté absolute. Certes, jusqu'à l'achèvement du système complet du savoir, le rationalisme absolu ne saurait être qu'un probabilisme. Le but de la philosophie est pourtant de constituer des notions et de les enchaîner. Si la méthode analytique y a échoué, il appartient à la méthode synthétique de chercher par quel progrès, de la notion la plus complexe jusqu'à la plus simple, l'esprit réussira à « se justifier lui-même »:

ce que veut être l'entreprise d'Hamelin, c'est, selon sa propre expression, une *noodicée* (p. 497).

Ce que je viens de dire ne représente que le schéma de la doctrine et n'en fait pas apparaître la substantielle richesse. Peu de livres sont en effet plus pleins que celui-là. Mais la condensation de la réflexion y est telle qu'un premier contact peut n'y laisser apercevoir que la beauté sobre de ce grand « poème dialectique, » la rigueur et la précision d'un style vraiment philosophique, qui pourtant ne manque, ni de noblesse, ni de fraîcheur. C'est donc une œuvre qui exige d'être méditée, et qu'il ne faut pas juger et critiquer en se jouant: elle demande à être étudiée avec gravité, comme elle a été écrite.

BIBLIOGRAPHIE

L'Essai sur les éléments principaux de la Représentation était depuis longtemps épuisé, quand M. Darbon, professeur à l'Université de Bordeaux, ancien élève d'Hamelin en a donné en 1924 une 2^me^ édition (Paris, Felix Alcan), enrichie de notes et d'un Index. Ces notes, qui ont exigé de difficiles recherches et un savoir extrêmement étendu, sont de nature à rendre au lecteur un service dont l'importance ne saurait être exagérés: elles identifient les auteurs et les textes auxquels Hamelin fait allusion au cours de son exposé; identification particulièrement délicate en ce qui touche les contemporains lesquels systématiquement ne sont jamais nommés par Hamelin.

Plusieurs études ont été consacrées à l'*Essai*, notamment par E. Chartier, *Revue de Métaphysique et de Morale*, Nov. 1907; Lionel Damriac, *Revue Philosophique*, 1908, I; *Année philosophique*, 1907; *Revue de Métaphysique et de Morale*, 1909; plus deux articles inédits qu'on trouvera dans le livre posthume du même auteur: *Contingence et rationalisme*, 1925; D. Parodi, *La philosophie contemporaine en France;* L. Brunschvicg, *L'orientation du rationalisme* (*Revue de Métaphysique et de Morale*, Juillet 1920), étude qui doit être complétée par la discussion à la Société française de Philosophie (séance du 24 février 1921), publiée dans le Bulletin, 21^e^ année, n. 3-4, Juillet-Octobre 1921, p. 33 sqq.

On trouvera une bonne bibliographie de l'œuvre d'Hamelin dans Jean Baruzi, *Philosophes et savants du XX^e^ siècle:* I. *Philosophie générale et Métaphysique* (1926), p. 21.

SECTION 4

(First Session)

Time: Tuesday, September 14, 2.15 P.M.
Place: Gore Hall Dining Room
Subject: Contemporary Philosophy. Reports on Present Tendencies in Different Countries
Chairmen: E. L. SCHAUB, Northwestern
WOODBRIDGE RILEY, Vassar

CONTEMPORARY PHILOSOPHY: BRITISH

JOHN LAIRD
(*Aberdeen*)

ALTHOUGH I have accepted, and with great pleasure, the request to report to this section of the Congress (counting it an honor to have been asked) I have to confess to certain profound misgivings. Knowing as I do, how prompt American philosophers are to notice what is being said on my side of the Atlantic, and how accurate, upon the whole, their diagnosis is, I can scarcely avoid the reflection that, in all probability, I am speaking to an audience better informed than I am. At any rate I have nothing new or hidden or outlandish to reveal, and since I have myself played a small part in the action I am asked to describe, I am likely to be a less disinterested witness and something less of a prophet than the majority of my hearers. This I suppose should go without saying, yet I feel I have to say it; and since it would be an insult to you to supply catalogues of names or a digest of opinions, I have to follow the other and quite objectionable course of offering you some general impressions, as partial, as confused, as little divinatory, and quite as insular as my own mind is. Any other Briton, although he might succeed better, would have, in the end, to say the same.

In my own view, I have to speak, in the large, of an age as divided as it is prolific, of a questioning and emancipated age which nevertheless is relatively free from skepticism, and singularly hopeful despite its lack of confidence in the particular solutions with which it is presented from time to time. The reasons for this are perhaps not wholly mysterious. Two or three lusters ago, a certain variety of idealism had an unusual predominance in Britain and bade fair to be something of an incubus. To say so, I know, is ungracious, and I hasten to explain that I do not mean to deny the greatness, the sincerity, or necessarily even the truthfulness, of this philosophy or of its principal exponents. Nevertheless, in the form in which it was actually expounded, it was unable to avoid the appearance of esoteric profundity, holding itself above the sciences and therefore above all the other intellectual idols of the age; asserting itself, with a certain proud humility, to be the guardian of a long-continued, but jealously select aristocracy of opinion. It was well worth our while, I think, to be forced to see that we might have to unlearn this philosophy, and that, if we did unlearn it, there was no single supplanter to succeed instantaneously to its dominion. The challenge and method of argument which for a time was commonly called realistic played the greatest part, I think, in this turn in the current of British philosophy, but "realism" did not involve the same kind of peril. In the beginning it was an epistemological doctrine which did not, of itself, imply any suggestions toward an ontological synthesis. Any of the realists, therefore, who became synthetic philosophers had to look outside their philosophical realism for the cardinal principles on which they might proceed; and most of them towards the sciences. This need not have been a hopeful proceeding, for the philosophers might have known so little of the sciences that they praised the wrong things or on the wrong grounds, and the scientists might simply have said "This or nothing" and continued on their course. As it chanced, however, some of the more eminent of these philosophers were also competent scientists, and many of the scientists found themselves constrained to raise and seriously to ponder large philosophical issues of their own proper accord.

As you all know, this is history, and something stale. I am offering it only as an explanation of our hopefulness despite our many divisions, and of our sense of emancipation whether or not we have achieved the substance of authentic freedom. The hopefulness, I concede, comes as much from the sciences as from philosophy and I also admit that the renewal of this ancient alliance between philosophy and the sciences is not without its dangers. Nevertheless, if my diagnosis is correct (and it is the first thing that anyone would say) the consequence is that the present phase of our philosophy is really exceptionally stimulating. It is not so much that we think we have stepped back in order to spring the further as that we think we have made a real advance toward discovering that which is solid. More particularly we think we appreciate the devastating treachery of the seemingly solid, and something at least of the fundamental distinction between unavoidable complexity and spurious subtlety.

You may ask me, however (and with reason), what in detail I think we have gained; and greatly daring, I must now try to answer. In the first place, then, I would suggest that we have forced ourselves to mark and ponder the entanglements and the unavoidable complexity of the facts which show themselves in sense-perception, and that most of us have a greater sense of responsibility and a greater circumspection in the interpretation we put upon them than was the fashion formerly. In this enterprise, I think, the principal credit belongs to Mr. Moore, and I would suggest that he has left us really with very little excuse for confounding, say, privacy with subjectivity, momentariness with mentalism, or physical relativity with psychical essence.

I suggest, secondly, that certain aspects of the relation between knowledge and reality have been pretty thoroughly explored, and that instead of vague declamations about the unity of subject and object, or a theological confusion between creation and omniscience, we are setting ourselves seriously to ask what, in Mr. Johnson's language, is the precise relation between the constitutive and epistemic operations of the knower, and how far, from the necessity of things, any piece of knowing, or this or the other variety of knowing must be regarded as constructive, how far it need not be so regarded. To be sure, these problems are not new, and I am not trying to assert that any great advance has been made concerning them. But I think they are very present to us, and although I have noticed exceptions, I think there is less heard now that is merely specious upon this subject and more that, despite its tentativeness, is really excogitated so far as it goes.

In the third place, we have had the great advantage of seeing a really serious attempt at metaphysics in the grand manner made, and from an original point of view thoroughly consonant with the spirit of the age. I refer, of course, to Mr. Alexander's great book. It is still too early to say how great this advantage truly is, or how far the sedulous detail of the argument in the book is adequate to the magnificent conception of it. The book, however, has carried most of our discussions into an entirely different plane from that in which we were accustomed to move before, and when Mr. Stout and others have said what they have to say upon it in a form they are willing to let stand, I think we shall find our metaphysics in a very healthy condition of vigilance.

Fourthly (I think), the study of logic has sensibly advanced. It may not be easy to evolve a satisfactory doctrine from the works of Mr. Johnson, Mr. Maynard Keynes, Mr. Russell, and the late Mr. Cook Wilson taken together, but the very variety of this first-rate work is peculiarly stimulating and is very unlikely to be sterile in the end.

Fifthly, while I do not think we can be said to have evolved a new method in metaphysics (if we had, it might not be the better for its novelty), I think there are several respects in which there have been fruitful explorations. Many of us were taught by Mr. Moore and by Mr. Russell (in his early days) to stick relentlessly to some relatively special problem (such as "internal relations," discontinuity, or the meaning of "real") and something has come of this. There has been genuine progress in the analysis of really critical problems, and although sometimes the effect of this proceeding is to make an author think he is bound to produce a special "view" upon every special topic that presents itself, even this is not altogether a defect. Again, the age is peculiarly fertile in the discovery of new conceptions, and if we are only learning to use these and to guess at their force we are still all the better for this strenuous intellectual gymnastics.

Sixthly, while it would probably be a piece of effrontery to suggest that the present age excels its predecessors in the range or in the assiduity of its philosophical scholarship, I think the work of our own scholars, during recent years, has been rather peculiarly stimulating and helpful. I need not refer in detail to recent researches into the sources and the influence of Platonism, Aristotelianism, and Plotinism, or to the unusual excellence of such a book as Mr. Gibson's *Locke's Theory of Knowledge*. What I should like to suggest, rather, is that the attitude of free and even of adventurous exploration which (despite its tentativeness and frequent fumbling and stumblings) is the healthiest feature in our present condition has borne fruit in our philosophical scholarship. In the matter of philosophical truth, we are pluralists, historically speaking. Instead of endeavoring to illustrate "modern thought" from ancient sources, or to force a respectable pedigree upon opinions we happen to have formed, we have at present a genuine and praiseworthy desire to roam widely over the history of thought with the primary object of understanding what was meant, and of refreshing ourselves by seeing good points well taken at all sorts of times and places. The revival of general interest and of independent study concerning scholastic and pre-scholastic mediaeval theory is an encouraging sign of the times. With us it is, in the main, a secularist not a clerical movement, and although very few of us could ever hope to have either the industry or the equipment necessary for becoming competent mediaevalists as well as classicists and modernists we have the good fortune to find in Mr. Taylor, and perhaps in some others, leaders who can stimulate our interest and correct some of our stupider prejudices over the whole of this immense domain. In the same way, and not less importantly, we are coming to appreciate (or at least are being given the chance to appreciate) the relations between the philosophy of any epoch and what we should now call the speculative and scientific outlook of that epoch. Indeed, even the weaker among us have now very little excuse for regarding philosophy and its history more technically and with less catholicity than is and has always been its proper due. Mr. Whitehead's recent Lowell Lectures — but why should I talk about these in America?

In the seventh place, there is a growing disposition to believe that the resolute efforts of the sciences toward evolving and elaborating new conceptions, together with their eagerness to explore the margin and hinterland of their provinces as well as the fenced and cultivated middle regions have had the effect of permitting and promoting philosophical speculation of the broader sort and more especially that which concerns the relations between spirit and nature, mind and matter, mechanical routine and creative invention. In saying this I am very well aware that there is a danger of our congratulating ourselves too soon. What is commonly said, in this connection, is that there is no longer any question of a crude dualism between the extremes of mind and matter but on the contrary a graduated hierarchy with waves of pervasive analogy throughout, a general kinship within the cognoscible universe together with the chance of development, perhaps even the indications of the "emergence" of something higher than we can ever encounter at present. Since "emergence" is not really a concept but a metaphysical way of saying that *a priori* all sorts of things may turn up, and since a hierarchy of values or even of complexities bears no simple relation to temporal process (however new-fangled our view of Time may be), I do not think that we can point to much in the way of definitive achievement in this region. The hope lies rather in the range and emancipation of our interest in these matters. Our attitude is no longer that monism may be too rigid, or that dualism must somehow be overcome, but rather that if we immerse ourselves in the movement of spirit or life or matter we shall in the first place find something authentic and inexpugnable, and in the second place find these authentic realities suffused with affinities to the others and void of the recalcitrance too often imputed to them. It is in the serious exploration of these affinities, however, rather than in the mere assertion of them, that the hope for the immediate future lies.

Certainly we have to pay a price for these far-flung ambitions, and for our determination in pursuing these fashions. Exploring the jungle is very well, but cultivating one's garden is very well too, and even if the soil of our gardens has shown something of a diminishing return it is not at all unlikely that our gardens are not nearly as well cultivated as they used to be. I do not think that our wide-ranging psychologies have really achieved very much, and our ethics, I am sure, has been quite peculiarly sterile. If it is true, in a certain sense (as Mr. Muirhead has recently said) that our excursions into value-theory have gained a certain depth by endeavoring to prove themselves as effluence from cosmic process (and therefore as something trans-social), we have also been very negligent in assessing them at their own rating, and I do not know that these tertiary effluences are so very impressive. In particular our inquiries into the rationality and the proper authority of our ethical notions have been left in abeyance. We have to reckon this, I think, among our losses.

Also I do not think that the chastened and perplexed assertions of latter day theologians become either firmer or keener in the pages of the philosophers who deal with these subjects. The supersensible, in these days (if one may apply such metaphors to it), is fitful, timid, and very pale. Perhaps this is the penalty of any alliance between philosophy and science. Certainly it seems to happen when theologians set out to be accommodating in these affairs. To be sure there is no absence of interest in mysticism, the lives and the communion of the saints, or in the intimations of everlastingness. For the most part, however, there is curiosity rather than conviction in this interest.

It is time for me now to make an end of these impressions, and to assure you once again of my regret for the partial and superficial stamp of them. The more we think of it the more, I consider, we should hesitate in offering generalizations about so individual a thing as a man's philosophy (or at any rate as a Briton's philosophy). In a land where there have been scholastics for every Baconian, Platonists for every Hobbist, a Stillingfleet for every Locke, and a Grote for every Mill; where Oxford, in the main, refuses to see more than a "certain merit" in Cambridge, and Cambridge has a rather tepid interest in "the right kind of nonsense" which is the fashion at Oxford for the time-being, where advanced thinkers profess to become (strenuously) as little children or as plain people, yet achieve a highly singular innocence and a plainness quite without parallel, it would be useless to look for any single philosophical movement, and everything I have said must be understood in subjection to this qualification. There never has been a British philosophy within the island but always a number of philosophies each of them having or very rapidly acquiring a distinctively native cast. Even when there is a fashion for discussing certain topics rather than others (and the topics which come to the forefront have very often no genuine connection *inter se*), these topics, for the most part, are approached from such very different angles and with the hope of reaching such very different issues, that even the similarity that appears to exist is subject, in fact, to the profoundest qualifications. It would be an idle and a foolish dream to expect the thing to be otherwise, and philosophy would be the poorer if it were. In this matter at least there is a radical pluralism, and the circumstance is not at all to be deplored. When I hear of people devoting their lives to the definitive solution even of some one big problem, I am sorry for the character of their ambition.

CONTEMPORARY AMERICAN PHILOSOPHY

Frank Thilly
(*Cornell*)

WHAT characterizes the most popular American philosophies of the day is their faith in the methods and conclusions of natural science, their consequent interest in the problem of knowledge, — which is often reduced to a problem of practical human values, — and their antagonism to the idealistic systems which flourished in England and America long after their eclipse in the land of their birth. Mind or consciousness, which played the leading rôle in the past, now takes a minor part; indeed, we find it stripped of its former functions and glory until nothing is left of it but a name. Its requiem is sung by behaviorism; and materialism, the laughing heir, finally gives it decent burial.

Let us turn first to the realistic schools, both of which have published volumes representing their respective coöperative labors. *Critical* realism follows in the wake of the older epistemologies, employing, however, a new terminology that often conceals the identity of old acquaintances; and like its predecessors it carries a working metaphysics in its kit. The nature of the object known is said to be reflected in consciousness, i.e., something is given: a datum, quality-complex, the essence, which finds its vehicle or bearer in a mental state, — the tenuous ghost of the old soul-substance. We have the irresistible, instinctive feeling that what is given is the object itself and, besides, pragmatism instructs us that everything is *as if* realism were true. But we never get beyond the appearances or phenomena of the old discarded theories. Even Santayana cannot help us here with his two heroic organic leaps, for they turn out to be mere acts of affirmation and faith. The specter of the noumenon continues to haunt us as of old.

We are also told that the data must represent the character of the object, at least in some measure; but there is no agreement in the school as to what they actually include. According to some they embrace the primary, secondary, and tertiary qualities; according to others, only some of the primary ones. Thus: "the content of knowledge offers us the fundamental categories, such as time, space, structure, relations, and behavior, in terms of which we think the world"; or more simply, knowledge is the recognized possession by the mind of the form of the thing. But, we must ask, is the form, the law,— the physicist's system of electrons, for example,— a mere reflection of the nature of the object in consciousness? And, besides, how can we ever reach the form of the thing itself if the percipient can never get beyond the datum except by an act of faith? And then there is the teaching that the essences have independent ideal existence; they are not perceived but thought; they are universals, meanings. In the last analysis, however, they are products of the cortex of the brain, epiphenomena. Yet, when thought is embodied in language, it somehow becomes an agent in the physical world; language, like the wooden Greek horse, secretly carries the meanings into the enemy's camp. We are also told that although thought is a part of nature and mechanically helpless, ideas in a certain sense become directive in a mechanistic universe when they are conscious. Have we not here a heroic effort to reconcile mechanism and idealism, to save a place for mind in a mechanical universe?

The *neo*-realists frankly base their theory upon metaphysics; indeed, metaphysics must be emancipated from epistemology: the nature of things cannot be found in the nature of knowledge. And it is the scientific method of analysis that will lead us to knowledge. We must start with a physical world of existences and a logical world of subsistences, both of which are real and analyzable into simples. Analysis, however, does not destroy its object: individual things are independent of their being known, and the relations in which they stand in no way change the object, that is, the relations are external. Hence, knowing can make no difference to the entity known and is not causally related to it. Moreover, the same object may belong to both the physical world and to consciousness without any change: the reality is independent of the knowing it. And everything that can be known, or even not known, is a reality: not only physical things and mental processes but universal truths, ideals, values, concepts, morality. The new realist relegates the entire ideal, non-physical world to the realm of subsistences, which is real but does not exist in space and time. Here too we have a distinctly idealistic note, a note not at all out of harmony with epistemological realism as such, as some neo-realists frankly admit. Others, however, in their zeal for scientific analysis, and fearful of the fiction of a soul, reduce mind to a relation between objects; but the relation turns out to be a relation of meaning and we again have the old consciousness on our hands. The relation is therefore defined by the more scientifically-minded as the relation between the mechanistic organism and the stimulus, consciousness itself finding its basis in the potential energy of the brain.

We come now to Dewey, in whom the spirit of revolt is more independent and far-reaching than in many of his contemporaries. He repudiates all theories which conceive the universe in analogy with cognition, whether as a mechanism or as a sensational or conceptual system. He protests against reducing man's beliefs, aversions, affections, to mere subjective impressions, to mere epiphenomena or appearances; against a block-universe in which need, uncertainty, choice, and novelty would have no place. His chief concern is with human life, its interests, its values, and its works: *Greift nur hinein ins volle Menschenleben und wo ihr's packt, da ist es interessant!* It is for this reason that his philosophy, often in a distorted form, has become the American Philosophy *par excellence.*

Dewey rejects "the idealistic fallacy," the view that would make reflective thinking with logic as its norm the standard for all experiencing. Equally objectionable to him is a philosophy that sets up intuition, mystical certainty, and religious experience as a higher kind of knowledge. His own basal thesis is that things are what they are experienced as: this he calls unsophisticated realism; and the method of taking things in this unsophisticated, uncritical way, — simply, directly, impartially, — is the genuine critical method, *critical* empiricism. And we experience things not merely as known but also as desired and undesired, as good and bad, beautiful and ugly. We have to do here with organic attitudes and dispositions, with active acceptances and rejections. Indeed, thinking itself is an attitude of inquiry; and we find that a meaning is true so far as it is tested through action that carries it to successful completion. An hypothesis, for example, that meets with practical success, that is verified by experiment, is accepted as truth. In this sense the utility of the idea is the test of its truth. Dewey universalizes this thought to mean: thinking is an instrument in the service of the will, and its success in satisfying the will is its end and test. This is true so far as it is not forgotten that among human purposes is the will to know. He himself tells us that we must take experiences just as they are, impartially, and distinguish between the different kinds of experiencing; he analyzes them, searches after their relations to each other, thinks in the old-fashioned way, with logic as his norm to guide him in his desire to understand.

And the same kind of unbiased reflective thinking is employed by our pragmatist in the study of the value-situation: it reports the value-experiences just as they are, differentiates them, and shows how they influence each other. There are immediate goods or values — objects are wanted, desired, striven for — and there are principles by which they may be appraised, regulated, and verified. That is, there are goods *de facto*, desired goods, and goods *de jure*, desirable, reasonable, "real" goods. Knowledge is a means of liking and choosing knowingly, responsibly, critically instead of ignorantly and fatalistically. But what shall be our criterion here? we ask. We are told that the rationalist's *summum bonum* is an abstraction, and that would-be naturalism with its appeal to the strongest desire will land us in nihilism. The answer is, we learn the bearing of the goods by trying them out; the better is what will do more in the way of liberating and increasing likings, values, — of making goods more secure, more coherent, more significant in appreciation. In other words, the test of a liking is its capacity to liberate, increase, and secure other likings, that is all. Santayana's verdict that Dewey is an inveterate naturalist would seem to be well founded. It might also appear that he is the philosopher of twentieth century Philistinism *par excellence:* now that "the requisite tools of physics, physiology, and economics are at hand," he tells us, "the work of criticism can be begun." These, however, are mistaken judgments. We must not forget that Dewey the naturalist is also a sincere and ardent social idealist and a thoroughgoing optimist. "Social reform," he insists, "must not be conceived in a philistine spirit; it aims at the liberation and expansion of the meanings of which experience is capable." Nothing but the best, the richest, and the fullest experience is good enough for man: the positive concrete goods of science, art, and social companionship. Dewey does not carry his naturalism to its logical conclusion because he has an abiding faith in human nature. It is for this reason, perhaps, that Santayana characterizes his naturalism as "half-hearted and short-winded," as "essentially a moral attitude or lay religion, as a transcendental moralism."

Indeed, there is something "half-hearted" in nearly all the new philosophies, as is shown, for example, in their apologetic treatment of mind or consciousness. Consciousness appears in various guises, as quality-complex, relation between objects, organic attitude; the thoughts which it formerly thought become logical entities in an independent shadow-land of subsistences. It is no wonder that the new science of behaviorism spurns it as useless or non-existent. For it human conduct is sensori-motor action; — the reactions which result from the operation of stimuli upon a nervous system having certain acquired and inherited characteristics form the subject of its story. Here we have something tangible, objective, and verifiable, something that can be scientifically handled. Perry has made a thoroughgoing attempt to apply the behaviorist method in the field of purposive human conduct. He does not abandon consciousness but regards the animal reflex or habit as the more elementary phenomenon. Purpose, like complex and instinct, is just the particular neural set or tendency or disposition of an organism. Determination by the future does not mean determination by an antecedently existing idea of a future result but the action of the present disposition that is correlated with future consequences. It is the set of the nervous mechanism that is responsible for the action which we call teleological, intelligent. It seems plain that the entire behavioristic enterprise would be impossible if there were no convenient consciousness to fall back upon at every step; and we are not surprised that some members of the school hesitate to abandon it. The behaviorist translates into terms of nervous disposition and action what he believes to be taking place in an actual conscious situation, in which the agent observes, thinks, plans. If he were not himself a thinking solver of practical problems, there would be no behavioristic theory of human conduct. And even if consciousness played no directing part in conduct, he would still need it to guide him in his scientific explanations of that conduct.

All this, however, would not prevent us from studying action from the outside, so to speak, or from calling acts of adjustment intelligent in the Pickwickian sense, as we might do in the case of plants or even of machines. This is what Perry does when he regards mind as something that "intervenes as an arc or circuit of the general causal nexus"; it is in this sense that intelligence is for him an observable fact. But, we must ask with Lovejoy, what are the observable facts in the case of the planning action in which we find entities which are not real parts of the material world? A past or possible future state of the material world is not at the moment when it is represented in the experience of the planner a part of the real material world. To be sure, the behaviorist falls back on his neural sets and easily translates whatever is revealed in consciousness into terms of the intervening arc; but is he not fishing in muddy waters?

In behaviorism consciousness, mind, finds its occupation gone or gives up the ghost. Similar efforts to depreciate it have already been noted in other philosophies of the day; and it is not surprising that the charge of materialism has been raised against them. It is, however, not always easy to prove the charge because the new materialisms, like their nineteenth century predecessors, are lacking in logical structure. We may characterize as materialistic the behavioristic view which identifies consciousness with mere neural sets and intervening arcs, as well as the theory which regards it as a mere epiphenomenon in a mechanical system. Among the critical realists Sellars and Santayana have been singled out as materialists. According to the former, consciousness and neural activity are both variants of the cortex of the brain. Without neural action consciousness can do nothing, and in certain cases neural action by itself can do nothing: it needs the "assistance" of the variant consciousness. This consciousness finally turns out to be physical and extended; and we have perhaps the most consistent system of materialism since the days of old Democritus. The same cannot be said of Santayana's philosophy. His essences are said to be ideal, not mechanistic; they are neither states of mind nor physical existences but meanings. Nevertheless, they are automatically generated by organic processes — they are the products of the structure of the world, epiphenomena — and by themselves they are helpless. They can become efficient in the mechanical universe only through "the overflow of the physical basis of thought." There ought to be no such difficulty if thought is the product of the organism and the organism is ultimately nothing but a mechanical system in the universal mechanism, for in such a world thought would have to march in the great mechanical procession. If Santayana is a materialist, he is only a half-hearted one; a whole-hearted one would throw these ideal essences overboard or frankly insert them in the causal mechanical series, not hide them behind "the overflow of the physical basis of thought."

As to the neo-realists, the entire spirit of the school, with its non-physical world of thought, would seem to be opposed to a mere mechanistic interpretation of reality. Two souls, however, are lodged in its corporate heart: it manifests a deep respect for the logical entities and has an abiding faith in natural science. We hear that the knower which as known belongs to the sphere of subsistence is also some variety of agency homogeneous with the environment, on the same plane as space, number, physical nature. That is, the thinker is of the earth earthy but his thoughts subsist in logic-land, and both dwell together in the one cosmos of knowableness. Here are all the materials ready at hand for an idealistic philosophy on the Hegelian plan. Then we have the other teaching that consciousness, or potential energy in the brain, is nothing but a relation between the organism and the external energies, — a doctrine which, if logically developed, would give us a consistent materialism.

And now, in conclusion, what shall we say of this new philosophy as a whole? It has been characterized as a closet-philosophy remote from life and its works, as immersed in specialistic problems and technical terminologies, each group swearing by its official tenets in its own specific jargon, like the old scholastic orders. There is some truth in these complaints, which are not new in the history of human thinking. It must not be forgotten that we are living in the reign of science and that popular monarchs are always feared and obeyed, be they theological, metaphysical, or positivistic. The new theories seek to make their peace with the new science; and the terms offered by them are often over-generous. And the enterprise has not been unprofitable, for, after all, our interest is centered upon the old fundamental problems, which are being studied from new and often suggestive points of view. And in spite of the most painstaking efforts to get rid of consciousness by dressing it in new clothes and giving it new names, it still persists as the big problem. It is therefore impossible to ignore the so-called idealistic philosophy, which has itself kept in constant touch with the new movements and seeks to do them justice. It too begins with the frank recognition of objective reality; it too studies the world of experience; indeed, what else is there to study? And it finds that to be an object is to stand in relation to a subject, — a position which the new schools themselves cannot escape, in spite of their efforts to hide their thought behind new formulae and new names. Another thing: the knowing attitude is not the only attitude taken by the person: mind includes will and purpose; it is teleological, it interprets according to means and ends. The pragmatists are right in emphasizing this phase of mind; their error consists in subordinating mind to mere practical ends. One of the ends of the mind is just to know, to understand; and such knowledge has both practical and theoretical value. Again, analysis is a most important function of knowledge, but so is synthesis; the mind seeks unity not only in things but in itself: otherwise it would go insane. The new realism leaves us with a collection of fragments, — *wehe du hast sie zerschlagen, die schöne Welt,* — physical things, meanings, relations, logical entities, which must somehow be put together again. Perhaps its work of destruction in the philosophical china shop has been worth while; at least it has left some valuable pieces which can be utilized in the work of reconstruction which is bound to follow. And when pragmatism has realized its mission of emphasizing the importance of life in its larger aspects, it may perhaps tell us how actually to live: it will enter the fields of art and literature and ethics and politics and religion, and mark out the paths to a new culture. That is what the great thinkers from Plato down have tried to do for us. Their efforts may be failures, but what have we to put in their place? We cannot learn in the short space of a lifetime, from our own individual experience, what is the fullest and best life, even with the pragmatic yard-stick in our hands. Who will lead us out of the wilderness into the promised land?

CONTEMPORARY TENDENCIES IN ITALIAN PHILOSOPHY

Raffaello Piccoli
(*Naples*)

THE turning point in the history of recent Italian philosophy is to be looked for in the years that immediately precede and follow the close of the nineteenth century. During the latter half of that century, Italy had become slowly estranged from a philosophical tradition which had continued with hardly an interruption, from Bruno and Campanella, through Vico, to Rosmini and Gioberti. The central humanistic tradition of Italian thought was still recognizable in the work of at least one great poet, Carducci, and of one great historian of literature, de Sanctis; but it seemed to have lost that power of rarefying and expanding itself into systems of abstract thought, which it had retained all through the Renaissance, almost as an heritage of the mediaeval unity of the arts and the moral sciences. The cause of this apparent decadence, however, is becoming clearer and clearer to us who look back on that period as on something that we have entirely left behind us, and is more foreign to us than earlier and happier stages of our culture. Because of our peculiar political conditions, because of the concentrated effort on purely national ends which those conditions had imposed upon us, Italy had found herself, when awakening at last as a concrete national being, in a state similar to that of *la belle au bois dormante* if she awoke today, and were taken to a sophomore dance. Our intellectual clothes were entirely out of fashion: in an industrialized Europe, with a magnificent and growing development of scientific thought, we were but a noble and poor peasant country, with an aristocracy of patriots and literati. The time had come when we, who had been the cultural *sartores* of all the other nations of Europe during the Renaissance and well into the eighteenth century, had to be *resarti* according to the foreign fashions, if we were to survive at all, to understand the language that was spoken around us, and to have hope of making ourselves understood one day, whenever we should have a new word to say to the world at large. And we were so humble and so full of good will that that we even forgot that many of the roots of modern scientific thought had first found their vital nourishment in the soil of Italy; and that our early men of science, from Leonardo de Spallanzani, from Galileo to Volta had set an example of the invention and observance of strictly scientific methods, coupled with a striking clarity and simplicity of abstract thought. We imported the new science of Europe, and we forgot our old humanities; but our religious and metaphysical nature revenged itself by building, on the foundations of science, a new positivistic and materialistic theology not less fanatical and irrational than the Catholic theology from which we had emerged at the close of the Renaissance. On the philosophical map of Europe, Italy might have been painted at the time of which we are speaking, with the bright red of positivism and materialism, only very thinly veined by a few green streaks of surviving Hegelian, or Platonic, or new-Kantian idealism.

We are now in the habit of speaking rather loosely of an idealistic Reaction which set in at the beginning of the new century. What really happened is that the positivistic theology, being largely exploited for more or less purely political and social ends, failed to satisfy both the most cautious and exact among the scientists, and the minds which had been kept awake, either through poetry and the arts, or through an interest in moral problems, to the highest exigencies of a truly human culture. But certain aspects of that reaction cannot be characterized otherwise than as a revolt of slaves, as it is clearly shown by the vogue that Theosophy enjoyed among us for a certain number of years, and by the so-called mythical movements, which followed each other without leaving any trace, and were very popular among men and women whose minds were too soft, not only for clear original thinking, but even for the mere passive acceptance of the Catholic dogma. Akin to the mystical movements, not less soft in a certain sense, and yet prompted by a sincere moral preoccupation, the Modernistic school of Catholic thought hoped, for a short period of struggles and illusions, to convert the Catholic Church to an understanding of the intellectual needs of the modern world. Its failure was not only due, as it is generally assumed, to the intrinsic difficulty of the task, but much more to limited understanding of the implications of modern thought; the Church, infinitely wiser than those prodigal sons of hers, knew only too well that the correlation of religion with science could not mean anything but total surrender to a new vision of the world, and therefore to a new religion.

Of far greater importance than these and similar vaguely idealistic movements, were those motives of reaction to the cruder forms of positivism which originated within the fold of science itself, and especially, on one hand, through the critique of scientific principles; on another, through an alliance with more refined, less ambitious theories of a positivistic character, like Schiller's humanism and William James's pragmatism. The scientists of the older generation had been very often singularly skillful and fortunate in the pursuit of their particular scientific aims, but not less naïve and inexperienced in dealing with the general principles of scientific method, and with their philosophical implications. Now, particularly through the work of Veronese and Peano, new instruments were created for the analysis of mathematical principles; and though Peano insists on refusing the name of philosopher, it is well known that some very significant currents of modern thought, not in Italy alone, but in England and consequently in America, owe to him, if not the substance of their theories, at least the characteristic tone which they have assumed in recent years. This fact may help to explain why a disciple of Peano, Giovanni Vailati, and his friend Calderoni, were among recent Italian thinkers in closest relation with English empiricism and American pragmatism; Vailati employing the methods of mathematical logic for the solution of larger problems of logical expression, and Calderoni, attempting an extension of the methods of economic science to ethics. With my friend and colleague Enriques, this tendency inclines to occupy a still ampler field of philosophical speculation; a genuine mathematician himself, he has passed from the critique of mathematical principles to the study of the foundations of physical science in general, and thence to the problem of knowledge, in which he has arrived at a definition of reality which is at the same time mathematical in its formal character, and realistic in its spirit. His analysis of that particular reality which is elaborated by science led him to an inquiry into the logical processes and the development of the fundamental concepts of science, and especially of geometry and mechanics, which has partly foreshadowed the principles and ideas that were later expanded by Einstein in his theory of general relativity. In his more recent work, he has applied the same method to the study of social reality, and to a research into the relations between the scientific and the religious spirit, and of the religious motives which are implicit in the constructions of science. A rationalist and therefore an opponent of idealism, he is at present confronted by the same problem which dominates every current of modern Italian thought, the problem of the conservation of values, as he chooses to call it, or of the ultimate nature of ideas and categories, as an idealist might define it.

It will be seen from the kind of philosophical questions which interest him, that there is almost as much difference between the old Italian positivists and a man like Enriques, though he himself belongs in a certain sense to the positivistic type, as between positivism and the new Italian idealism. The essential differences in philosophy are not the technical and scholastic ones; but the truly fundamental ones of style and personality. Not being a philosopher *ex professo* myself, but a mere lover and student of philosophy, and having had a direct personal and intellectual experience both of Italian idealism and of English realism, I feel strongly inclined to discount the importance of certain purely technical aspects of thought, which loom so large in the current histories of philosophy. I believe that in all times, and under every sky, men have tried, by different ways of approach, to make light in their own consciousness, and to discover the reality of life concealed, like the seeds of flame in the veins of flint, in the depths of their hearts and minds. I believe, in substance, that every philosopher is an idealist, though his humility might sometimes be so great as to make him vigorously deny this obvious truth.

On the other hand, a clear acceptance of the idealistic, or humanistic, character of thought, seems to me essential at least for certain purposes. The scientist may direct the light of his intelligence towards one particular end, and work as it were in one small luminous space, surrounded by unexplored darkness. This concentration of his attention may even be favorable to scientific investigation. But the philosopher, and the student of human nature and human facts, cannot be content with less than the totality, or at least the potential totality, of experience. His light flashes not outwards, but inwards, and he knows that the slightest alteration of certain ideal proportions will affect not one particular truth only, but the whole of reality.

This new style, this new attitude of mind, which characterizes Italian culture in the last quarter of a century, in the same way as it characterizes every era of vigorous thinking, was in part a result of a new life infused within the old academic circles by a few earnest and honest minds, and especially by Bernardino Varisco and Piero Martinetti. Varisco slowly evolved from positivism to a constantly deepening understanding of the religious import of philosophical thought. Martinetti, through a painstaking analysis of the solutions given by modern philosophy to the problems of knowledge, has reached a new form of transcendental idealism, which envisages philosophy, in a perpetual relation with the development of positive religions, as a total vision of the world and of the problems of spiritual life. To these names a few others might be added; but it is not my intention, and it would be impossible within the limits of this paper, to give a complete list of modern Italian thinkers. I shall only name Antonio Aliotta, who is well known to English and American philosophical circles, and whose thought has developed in constant contact with your recent philosophical tendencies; who, however, cannot be counted among the realists, though he seems at times to be strongly opposed to the main currents of Italian idealism. He would be willing to be called a relativist, or a relativistic idealist; but his relativism differs more in accent than in substance from that common consciousness of the historical character of philosophy, of the humanistic or pragmatic value of truth, which is the distinctive feature of all modern Italian thought.

The elaboration of this new style of thought was not, however, mainly the work of the universities and of professional philosophers. It was due principally to a return to that central tradition of Italian culture to which I alluded at the beginning of this paper. Not from abstract discussions on the principles of philosophy, but from the concrete problems derived from the meditation of literary, philosophical, and economic history, and from a direct experience of moral difficulties, the greatest of our living thinkers, Benedetto Croce, derived his own system of the Philosophy of the Spirit; the least systematic of all systems of philosophy, since the process of thought which gave rise to its leading ideas is still active and at work to produce constantly new problems and the necessity of new systematizations. I shall not try to make an exposition of Croce's thought; tomorrow I shall read a paper which he has written for this Congress and which is a complete statement of his actual philosophical position; a paper in which those who are already familiar with his thought should particularly note the new emphasis which he is laying on the religious responsibility of the philosopher, and also the increasingly positivistic character of his idealism. And on the other hand I have myself written a little book, not entirely unknown to some of my English and American friends, in which I have attempted to make Croce's philosophy accessible to the English speaking world. For many reasons, and especially because this task would compel me to enter into many abstruse details of philosophical technique, I shall not try to analyze the similarities and differences between Croce's system and the work of a man who was associated with him for many years, and who undoubtedly is one of the most important figures of contemporary European thought. The names of Croce and of Giovanni Gentile recur very often together, more probably on account of their long association in their studies, than of a truly fundamental philosophical affinity. And in fact, while Croce is becoming more and more what might be called an historical realist, Gentile has brought the implications of idealism to their extreme consequences, and has constructed a coherent and logical system of actualism, in which the Absolute identifies itself at last with that concrete, indistinguishable, synthesis of thought and action in which he recognizes the only reality of experience.

The influence of both Croce and Gentile on the Italian generation which has survived the war cannot be overestimated. But I think it is too soon to make any prophecy about the thought of this younger generation. We are now going through a time which exacts more from our active and moral nature than from our speculative power. Whether, in the recurrent rhythms of history, our new idealism be destined to give birth to a new and deeper naturalism, might well be an object of reasonable surmise. The problems which seem to announce themselves as needing a greater clarity, and new meditations, are those of the relations of Spirit and Nature, and of the essence of human personality. These problems are not, however, mere professional themes, but the philosophical expression of our deeper spiritual torments.

The task of philosophy, not in Italy in particular, but in the world at large, seems to be far from exhausted. In a sense, philosophy, or the conscious thought of man, has reached the point in which it will have to abandon the closed schools, the garden and the porch, and find a word which will be understood by all men. These gatherings of ours are but a symptom of this need. And we who have come here from the lands of your fathers, shall bring back to our homes not only the pleasant recollection of your intellectual comradeship, but the wonderful lessons of energy, of humanity, of good humor and kindliness that the mere aspect of American life is teaching us. More than in any other part of the world, you are here working for the establishment of the City of God on earth and among living men and women and children. Man is looking at last with clear eyes on his own natural and spiritual world, and finding it good. We, from the other side of the Atlantic or of the Pacific, from our still troubled countries, from our hopes and our despairs, look now to this new human civilization which is the outcome of the hopes and despairs, of the courage and energy, of men of our own blood, and ask you for your intellectual coöperation in establishing the City of Man, the true *Religio Philosophi* in our minds and souls. We have faith in the thought of man, and faith has been known before to work miracles.

SECTION 4

(Second Session)

Time: Friday, September 17, 9.30 A.M.
Place: Gore Hall Dining Room
Subject: Contemporary Philosophy. Reports on Present Tendencies in Different Countries.
Chairmen: E. L. SCHAUB, Northwestern
WOODBRIDGE RILEY, Vassar

NOTE ON THE PRESENT STATE OF PHILOSOPHY IN SPAIN

FERNANDO DE LOS RIOS
(*Granada*)

SPANISH philosophy of the present day has had as its immediate forerunner the rich development of speculative thought which began in the middle of the nineteenth century under the auspices of Professor Sanz del Rio, of the University of Madrid. It was he who introduced Krausism into our country, and therewith German philosophy. Around him there was formed the group which has directed Spanish thought for half a century, the figure of D. Francisco Giner, professor of philosophy of law in the University of Madrid, the pedagogue and "Alma Mater" of the new Spain, standing out particularly. He awakened and stimulated the most varied aptitudes in all who surrounded him, exercising over each of them the purest Socratic leadership.

From the Krausist period, when it became incorporated in a vital way into Spanish scientific and philosophic thought, German philosophy has never ceased to exert a profound influence, not to be compared with any other, on the philosophy of our country. Positivism, which penetrated so strongly into most of the countries of Europe, found great difficulties in the way of its spread in Spain. It was forced into alliances which gave it a special character, either through a fusion with Krausism, as was the case with the eminent late Professors Salmeron and Gonzalez Serrano; or with the Kantian position, as in the case of the professor of logic in the University of Madrid, Sr. Besteiro; or with scholasticism itself, as happens with a pupil of Wundt, Professor E. Luis Andres. Notwithstanding, there have been instances of positivistic thought in its original form, of which D. Luis Simarro, noted histologist and professor of experimental psychology, who died a few years ago, would be the most outstanding example.

All alone, as becomes a mystic, stands the figure of D. Miguel de Unamuno in Spanish philosophic thought. The historian would have difficulty in tracing the genesis of his thought, and its affiliations. He would discover a spiritual kinship with Pascal, and there would be a very profound connection with Carlyle and Kierkegaard. But neither the one nor the others would explain him; for Unamuno is profoundly Spanish, and the characteristics of his mysticism correspond faithfully to the religious psychology of our nation. Unamuno is heretical, as it would be difficult for a mystic not to be, since the fervor with which his soul seeks God and longs for immortality permits no adjustments with the formulas of reason. It is in another domain, not in that of reason, that mysticism finds its field. Unamuno puts the root of religion in the will to believe, in the desire for God. Hence, for him, religion is the tragic sentiment of life which consists in an unceasing struggle between the hunger for the Absolute, God, and the perpetuity of the Relative in life, between the panting after immortality and the persistence of the individual, and the sinister presentiment of the passing of the personality. But Unamuno is a Christian, and explains Christianity when he explains his own religious attitude. That is to say, he uses his own convictions as a starting point, for one of his fundamental principles, which he deliberately repeats, is that only by penetrating into the individual can we reach the universal. Thus he reaches the conclusion that Christianity is a struggle, an interior polemic, an *agonia*: "to live by struggle, by faith," says Unamuno, "is to doubt; a faith that does not doubt is a dead faith." With regard to his Christian faith, he adds: "I struggle, I am in the agony of a man looking toward the unrealizable, towards eternity."[1]

The neo-Kantian movement produced a vivid re-echo in Spain, and a group of teachers, later to exercise a strong influence on national thought, studied in Marburg with the masters. Among those whose early years were spent at the side of Hermann Cohen there stands out especially the figure of José Ortega y Gasset, professor of metaphysics in the University of Madrid. As time went on, he outgrew this first influence, and his subsequent development was greatly influenced by the "phenomenology" of Husserl, whom he has made widely known through his lectures; he has now arrived at a position of his own. There is not today in Spanish philosophy any other figure that can be compared with Ortega y Gasset; on a recent occasion the eminent German critic, Curtius, called him one of the twelve peers of European intellect (*einer der zwölf Pairs des europäischen Intellekts*).[2]

The philosophy of Professor Ortega is founded on two great intellectual ambitions: the surpassing of Kantian subjectivism and in general of every rational position by means of the insertion of vital values in the logos, and the hierarchical disposition of the values of being (*el ser*) by means of an infinite multiplication of *perspectives*. Señor Ortega looks upon rationalism as a product of the mathematical activity of thought, which, if it has its adequate function in a fixed order of mental activity, is incongruous when it is a question of understanding being in its rich multiplicity of forms and in its unity of essence. Our life is made up of actions and movements, but the aims which bring about these actions, as well as our movements, are part of the very organism of life; that is to say, we live as a function of our surrounding world, which in turn is modified by the action which we exercise upon it, whence results a mobility in that world which essentially affects, once we unite *Bio* with *Logo*, the nature of goods and values in each epoch. When Professor Ortega pleads like Nietzsche for the autonomy of vital values, and inserts them in the hierarchy of being, he not only places himself in a perspectivist attitude, as Curtius has called it, but in an existentialist, in the sense which the term derives from the historical distinction between temporal existence and eternal essence; that is to say, he wishes each hour to live its life with the fullness that makes of it a distinct, culminating moment in the flow of existence, and to be understood as its vital and circumstantial essence demands; to sacrifice the vital to the rational is Byzantinism.[3]

This thinker has exerted a strong influence on others. Attention should be called, in this connection, to Professor Garcia Morente, the author of two excellent studies on Kant and Bergson.

The influence of Louvain has stimulated scholasticism, always so deeply rooted in our country. Especially noteworthy in this field are Professor Gomez Izquierdo and Father Zaragüeta, on whom the present movement of German philosophy, especially the theory of values, has not failed to exercise an influence. In the case of the latter this is frankly confessed. Of great interest is the fusion of scholasticism and phenomenology — which was itself originally influenced by scholasticism — as outlined in the work of the young and intelligent priest, Father Zuviri Apalategui (*Ensayo de una teoria fenomenologica del juicio*, 1923).

In the biological-philosophic field the great physiologist, Ramon Turro, recently deceased, has distinguished himself exceptionally. His chief work, *Orígenes del conocimiento* (Origins of Knowledge), has been published both in German and French, and has familiarized the learned world with his thesis in this field. Reduced to the briefest compass of explanation, his thesis is based on the consideration of the sensation of hunger as the one which first crosses the threshold of consciousness. But as that sensation is not a homogeneous one, but varies quantitatively, according to physiological conditions and the states from which it arises, the result is that by means of the sensation of hunger the concrete knowledge of the outer world is gradually enlarged. Hunger is, in its turn, an aggregate of elemental and specific sensations, each of which responds to the choice of substances which are lacking in the organism.

Finally, it is not possible to give a clear summary of the present state of Spanish philosophy without calling attention to the work of the learned Arabist, Father Miguel Asín y Palacios, professor in the University of Madrid, in his studies in the history of philosophy. His admirable study on *La escatologia musulmana en la Divina Comedia*, which appeared in 1919,[4] has aroused widespread interest everywhere, as is shown by the extensive bibliography to which it has given rise in every language. Probably it will not be long before an equal interest is awakened in his discoveries of the influence which Mussulmanic philosophy in general, and Spanish in particular, exercised on scholasticism and mysticism. It is not a question of returning to a study of Averroism, but of less known thinkers: Algazel, Abenmasarra, Abenhazam, or Mohidin el Sufi.

One of the contentions to which he is led by his inquiries is the following. In the twelfth century the book of Algazel, known as *Intentions of the Philosophers*, was translated into Latin. It explains the logical, physical, and metaphysical doctrine of the peripatetic Mussulmen. The translation was made in Spain by the Archdeacon Domingo Gonzalez and the converted Jew, Juan de Sevilla. From that time on, even St. Thomas begins to quote Algazel. In Spain he was followed, amongst others, by the Dominican Raimundo Martin, author of the work *Pugio Fidei*, in the first part of which he reproduced Algazel. Raimundo Martin, in his turn, says Father Asín, is followed by St. Thomas, "whose reasons in favor of the creation of the world *ex nihilo*, the knowledge of God with respect to individual things, and the dogma of the resurrection of the dead — negations of mediaeval rationalism backed by Averroism — are so analogous to similar reasonings in the *Pugio Fidei* that they are evidently a copy" (Mohidin, p. 218). This instance we have just cited from the work of Asín is sufficient indication of the importance of the work being carried on by the group of Arabic scholars in Spain, of which Father Asín and Professor Julian Ribera are two eminent representatives.[5]

We have endeavored to trace a brief outline of Spanish philosophical thought, lack of space preventing us from including other noteworthy figures.

NOTES

[1] The most representative works of this author are: *El sentimiento trágico de la vida*, *Vida de D. Quijote y Sancho*, and *L'agonie du Christianisme*. The first two have been translated into German, French, and Italian, and the first into English.

[2] *Europäische Revue*, April, 1926.

[3] Señor Ortega is the author of many essays; in his book *El tema de Nuestro tiempo*, 1923, he has given an *aperçu* of his ideas.

[4] In 1924 Mr. Harold L. Sunderland planned to publish the work in English under the title "Mohammedan Eschatology in the Divine Comedy."

[5] The most important works of this author are: *Algazel*, Madrid; *Mohidin* (Homenaje a Menendez y Pelayo), 1899; *La indiferéncia religiosa en la España Musulmana Ilgun Abenhazam* (Cultura Española), 1907; *Introducción al arte de la Lógica por Abentomlús de Alcira*, Madrid, 1916; and *El Cordobés Abenhazam primer historiador de las ideas religiosas*, Madrid. For J. Ribera, see *Orígenes de la filosofía de Raimundo Lulio* (Homenaje a Menendez y Pelayo), Madrid, 1919.

CONTEMPORARY PHILOSOPHIC TENDENCIES IN SOUTH AMERICA, WITH SPECIAL REFERENCE TO ARGENTINA

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AN estimate of the philosophic culture in South America can be made by taking the word "philosophy" either in its general or its technical sense. Many historians who have written on the history of general ideas, and particularly when dealing with the history of the Argentine Republic, have preferred to give schematic outlines of the thought inherent in the political and pedagogical ideologies. In this manner of course any civilized country has philosophic activities, since its educational and legal spheres involve cardinal principles of human conduct.

It may be said, moreover, that in South America philosophic thought — even in this sense — has generally been the result of the adoption and application of European philosophic speculation rather than the fruit of a preoccupation with the subject matter of philosophy proper. But in its transmission to these new regions of the world European thought acquired a vernacular coloring which is in itself of no small interest to the historian. It represents a possession and a hope of South American culture. Thus in Argentina — to take one example — there are elements of thought that are specifically Argentinian, despite their European roots.

Keeping in mind, then, the fact that in South America the prevailing tendency has been to put European thought to practical application, and using Argentina as a specific model, we may trace the evolution of South American culture under a large number of more or less diverse influences. We may note first of all the scholastic philosophy dominant during the early period of colonization; then the contributions of French thought during the struggle for national independence; after that the influence of the European romantic movements of the nineteenth century during the period of constitutional organization; and finally the overwhelming influence gained by positivism during the period of economic development and prosperity.

Positivism has dominated Argentina and South America as a whole during the last forty years. At the present time, it should be observed, the votaries of positivism tend to emphasize chiefly the negative aspect of the thought of Comte and Spencer. We say negative, first, because it neglects the fundamental problems of philosophy, and secondly, because it repudiates — at least in theory — all metaphysical preoccupations, professing instead a vague spirit of agnosticism. Moreover, it also has neglected the analysis of the very logic of positivism. Some of those attached to positivism — the more dogmatic ones — have devoted themselves to the metaphysical interpretation of Darwinian biology in the manner of Haeckel. One result of this was the brief *Creed* of Ameghino, the great Argentinian paleontologist, who in that work makes a bold profession of philosophic faith on the basis of a mystically materialistic cosmology. The explanation of this phenomenon is simple. Haeckel is one of those chiefly responsible for the vague philosophic thought of Spanish America. A noisy and decrepit Haeckelian senility found in its ranks educational scientists and literary psychiatrists, whose pamphlets on "the future of philosophy" constitute valuable documents for the future historian of the philosophic dilettantism on the coast of the Plata.

Positivism, it may be said bluntly, did not produce anything valuable in philosophy proper in South America. It is fair to recognize, however, that it bore some fruit in the domains of the social, juridical, and pedagogical sciences, especially under the influence of an evolutionary standpoint understood in the manner of Spencer. Here is reflected the interest in positivism taken as a method — an interest in harmony with Comte's repudiation of pure science and speculative philosophic effort.

But the devotion to fact for fact's sake has given rise in our Spanish-speaking countries to a situation in which science has been in a certain sense the victim of positivism. We have had an over-devotion to the technical truth at the expense of disinterested investigation. Something similar perhaps occurred in the United States. The effect here was not the same perhaps because in this country there was always a ready sense for the Absolute left open by the Puritan tradition, and this was able to feed a future philosophic sensibility. Among other reasons this explains why, contrary to what happened in Spanish-America, the United States should have had such conspicuous figures as Emerson, James, Royce, and Dewey — transcendental absolutism and pragmatism side by side. It may be mentioned in passing that the introduction of pragmatism into Argentina was itself the work of some positivists who insisted that pragmatism was the logical culmination of English empiricism, forgetting that we have here a school based on an essentially anthropocentric theory of knowledge and generally tied up with religious tendencies. May we not consider pragmatism as a peculiarly North American form of the classical German voluntarism — interpreted, to be sure, in pluralistic terms? Our positivists of pragmatic leanings have not searched so deeply — they did not even do this with positivistic empiricism. This is evident from the fact that they did not get from Spencer more than the mechanical concept of evolution, and they did not learn from John Stuart Mill more than what they read in his *Logic*. They said nothing about the *Examination of the Philosophy of Sir William Hamilton*, the metaphysical restlessness of which they did not appreciate.

As far as Comte is concerned he did not do more than inspire a worship for positive reality which his followers in South America never stopped to analyze. Haeckel was more fortunate. It may be said that no university man, no member of a cultural society has neglected to read (in popular editions) *The Riddle of the Universe.* Haeckel has been given all the tributes of the stationery store. We have already said that Haeckel was one of the major prophets of South American thought. His followers devoted themselves — with great editorial shrewdness — to publishing all sorts of pseudoscientific outlines of the master's thought, particularly on occasions of vague social reform movements and South American international troubles. In the last few years the homely opportunistic apologies of the Russian Revolution and the new-fangled movement of Spanish-Americanism have given additional opportunities for a large display of the same thing. In this way positivism attracted large groups of university men whose ideologic positions are determined by the exigencies of an economic or a political career.

Fortunately there are at the present time in Argentina evident symptoms of a new philosophic movement, set in operation by an increasing group of young university men who are coming to the philosophic field through the avenues of mathematics, biology, history, pure science, and also through philosophic studies directly. It is interesting to observe that this movement coincides with, if it is not the cause of, a gradual waning of the positivistic hold. It is a movement which has an authentic philosophic restlessness behind it, and which justifies many a hope for the future. It is true that in this coming generation there is a hasty shift from the positivistic creed to the idealistic doctrine by virtue of contagion from philosophic reactions in Europe. Those of us who in Argentina are responsible for the growth of philosophic activities are now fervently hoping that this shift to idealism should not be a mere movement of fashion, and that the visitations to the idealistic camp may prove beneficent in the minds of those who will sooner or later reach well-defined positions on grounds of earnest and reflective convictions.

Not that positivism is altogether gone for the present. But it tends to take the form in which it has been of some historical value in the country. We refer specially to its efficacy in dissolving many a trait of the traditional religious dogmatism. And in this respect present-day positivism goes hand in hand with other doctrines dating back to the eighteenth and early nineteenth centuries which continued to function even in the heyday of the older positivism. It is for instance notorious that the individualistic rationalism of the French romantic and revolutionary liberalism insinuated itself in the social and political upheavals and constructive organization of the last century. The Argentine constitution — a brilliant specimen of social liberalism — is a legitimate child of that rationalism.

Aside from these political and social currents, the present outlook in South America is also determined by European thought. Among the European philosophers who are at present most influential in South America we should mention Renouvier, Boutroux, and Bergson among the French, and Croce and Gentile among the Italians. All of these have a considerable number of studious readers. A large group of students has felt the influence also of a distinguished Spanish thinker, Ortega y Gasset. Señor Gasset recently spent an entire year with us and gave his students an orientation towards Germanic depth, making bywords for them of such names as Cohen, Rickert, Windelband, and others.

We are not under too great illusions regarding these contemporary influences. We see that these seeds often fall on the rocky ground of positivism and new-fangled views. And this is the problem, the problem of dilettantism in all its forms, that is faced in Argentina by the group of those earnest votaries of philosophy already mentioned. This group of students and teachers, their efforts often veiled in anonymity and shorn of tropical eloquence, constitute, in a sense, the welcoming committee for the European teachers who often visit our country.

This same group has been responsible for several activities which tend to lay the foundations for an incalculable future for philosophy in Argentina. One of the fruits of their work has been the recent organization of the Argentine Philosophic Society. This organization proposes to develop in Argentina some of the forms of philosophic devotion — periodical meetings, systematic publications, invitation of foreign philosophers, and the general coördination of the activities of students of philosophy with the activities of those devoted to pure science.

In conclusion, we may say that South American culture cannot be put in too stark a relief, especially if we take philosophy in its strict, technical sense. But to be aware of this does not imply a profession of pessimistic faith regarding Latin-American thought. We have seen that philosophy infiltrated its problems and solutions through the fissures of social and political life, long before there was any direct cultivation of philosophy in South America. And with the present efforts in the field, as well as with the encouragement given to philosophy by the government, there are many reasons for a decided optimism in regard to the future. These peoples, on account of their plethoric vitality and their unsurpassed racial and spiritual liberality, are perhaps in the most fitting condition to achieve, within the very near future, a philosophic culture free from the traditional vices and capable of offering a vision of the universe and of human life that, in spite of its being an autochthonous growth, will have that which befits a real philosophy — a universal value.

DIE GEGENWAERTIGEN STROEMUNGEN IN DER DEUTSCHEN PHILOSOPHIE

ERICH BECHER
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IMMER noch sind die neukantischen Richtungen in Deutschland stark vertreten.

Der Neukantianismus der Marburger Schule lehnt ausserbewusste „Dinge-an-sich" ab; das Denken baut in nie abschliessendem Prozess nicht nur die Erkenntnis, sondern auch das Sein auf. Die Empfindung ist dem Denken im Erkenntnisprozess keineswegs zu koordinieren; sie fungiert nur als Anreiz desselben und ist von ihm zu eliminieren. Das Musterbild des Erkenntnisprozesses bietet die theoretische Physik, die nicht ausserbewusste Dinge-an-sich abbildet, sondern unter Elimination der Empfindung die Realität erzeugt.

Der Kant'schen Ethik der Pflicht und Menschenwürde verleiht die Marburger Schule reicheren Inhalt und ausgesprochen soziale Richtung. Die Metaphysik wird meist abgelehnt und der wesentliche Gehalt der Religion in der Humanitätsmoral erblickt.

Auch die badische neukantische Schule lehnt die Dinge-an-sich ab. Wahrheit ist nicht Uebereinstimmung mit ausserbewussten Gegenständen; sie ist vielmehr neben Sittlichkeit, Schönheit und Heiligkeit ein absoluter Wert. Diesen Werten entsprechen allgemeingültige Sollensgesetze. Die Philosophie hat das System dieser Werte und Normgesetze zu behandeln. Wir finden dieselben in der Kulturwirklichkeit, der sie Sinn geben. Mit ihr haben es die historischen, auf individuelle Tatsachlichkeiten zielenden Kulturwissenschaften zu tun, denen die das Allgemeine und Gezetzmässige ohne Wertbetrachtung erforschenden Naturwissenschaften gegenüberstehen.

Bauch hat manch Beziehungen zur badischen Schule, nimmt aber eine durchaus selbständige Stellung in der neukantischen Erkenntnislehre ein. Er ergänzt die Kant'sche Pflichtmoral des kategorischen Imperativs durch aus den Kulturwerten erwachsende hypothetische Imperative, die sich nach der Veranlagung der Individuen richten. Die vorauszusetzende Realisierbarkeit der Werte fordert eine Gottheit als Vorbedingung.

Die neufries'sche Schule will durch Selbstbeobachtung und Selbstbesinnung zu apriorischer unmittelbarer Erkenntnis kommen, die sich auf das Selbstvertrauen der Vernunft stützt. Auf dieses gründet Nelson auch seine Ethik.

Eine Zwischenstellung zwischen Kantianismus und Empirismus nimmt B. Erdmann ein. Er vertritt die phänomenalistische Anschauung Kants, dass Dinge-an-sich zwar angenommen werden müssen, unser Erkennen jedoch auf die Erscheinungswelt eingeschränkt ist. Was für uns Menschen denknotwendig ist, braucht es nicht für anders organisierte Wesen zu sein.

Neben den von Kant ausgehenden, apriorische Erkenntnis anerkennenden Richtungen finden wir empiristisch-positivistische Strömungen. Für sie besteht nur die Welt unserer Erfahrung, unseres Bewusstseins (Immanenzphilosophie, idealistischer Positivismus); ja alles Wirkliche, Ich wie Körperwelt, ist lediglich aus Empfindungen aufgebaut (Empfindungsmonismus Mach's). Die Wissenschaft hat die Bewusstseinstatsachen möglichst einfach („denkökonomisch") zu beschreiben, in Gedanken nachzubilden. Durch Feststellung der Abhängigkeitsbeziehungen zwischen den Erfahrungstatsachen werden Vorauswissen und Naturbeherrschung ermöglicht. So ist das Erkennen eine im Daseinskampfe nützliche Lebensfunktion.

Bei der Aufstellung der Relativitätstheorie durch Einstein haben positivistische Gedankenmotive offenbar eine Rolle gespielt; doch est diese Theorie auch mit anderen Erkenntnislehren vereinbar.

Ostwald führte den Mach'schen Positivismus in einen energetischen Monismus über, welcher in der teils physischen, teils psychischen Energie die Weltsubstanz erblickt.

Vaihinger's positivistische „Philosophie des Als-Ob" betont stark, dass Denken und Wissenschaft, die für das Leben und Handeln bestimmt sind, in weitestem Umfange förderliche Fiktionen, d.h. bewusst falsche, widerspruchsvolle Annahmen verwenden. Auch ethische Ideale und religiöse Ideen repräsentieren lebensfördernde Fiktionen.

Vaihinger's Fiktionalismus berührt sich eng mit dem Pragmatismus, dessen Grundgedanken schon 1895 von Simmel vertreten wurden. Wahre, d.h. für die Gattung zweckmässige Gedanken werden nach Simmel durch natürliche Zuchtwahl entwickelt.

Mit dem Positivismus hängt ferner der Konventionalismus zusammen, welcher lehrt, dass Naturgesetze, wenigstens allgemeinste Prinzipien, nicht eindeutige Ergebnisse der Erfahrung, sondern willkürliche, allerdings zweckmässige und möglichst einfache Festsetzungen (Konventionen) unseres Denkens darstellen. —

Starke Gedankenimpulse sind von Brentano ausgegangen. Er schrieb allen psychischen Phänomenen eine („intentionale“) Richtung auf ein Objekt zu. Den Vorstellungen Urteilen und Liebe-Hasserlebnissen als den Arten psychischer Phänomene entsprechen die Ideale des Schönen, Wahren und Guten und die philosophischen Wissenschaften: Aesthetik, Logik und Ethik. Ueber den drei Idealen steht als Einheit derselben das „Ideal der Ideale,“ die Gottheit. — In der inneren Wahrnehmung erfassen wir die psychischen Phänomene mit unmittelbarer Evidenz. Der Evidenz und Wahrheit entspricht bei Leben und Hassen die (absolute) Richtigkeit. Das mit richtiger Liebe zu Liebende ist das Gute.

Von Brentano ist Meinong ausgegangen. Seine Gegenstandstheorie hat es mit den Gegenständen im allgemeinsten Sinne zu tun, d.h. mit allem, was gedacht („gemeint“) werden kann; sie fragt (wie die reine Mathematik) nach dem, was a priori aus der „Natur“ der Gegenstände erkennbar ist, ganz abgesehen von ihrem Dasein, ihrem Wirklichsein. So ist aus der Natur des Rot und des Grün a priori und evident erkennbar, dass sie notwendig verschieden sind. Hier haben wir eine von der Kant'schen völlig verschiedene Auffassung der apriorischen Erkenntnis. Meinong hat weiterhin die Gegenstände klassifiziert und untersucht, insbesondere auch das Gebiet der Werte bearbeitet.

Der Meinong'schen Gegenstandstheorie ist Husserl's Phänomenologie verwandt. Husserl, der auch von Brentano ausging, hat den Psychologismus und Empirismus in der Logik erfolgreich bekämpft, der die logischen Grundsätze als psychologische beziehungsweise empirische Erkenntnisse ansieht und sie dadurch der notwendigen, absoluten Geltung beraubt. Die phänomenologische Methode gewinnt notwendige Erkenntnis durch eine Anschauungsart, die vom Dasein des Angeschauten absieht und das Wesen desselben, z.B. der Farbe oder der Geraden, erfasst. Die Wesensanschauung erfasst apriorisch, was zu einem solchen Wesen notwendig gehört, was in ihm notwendig verbunden ist. So erkennen wir z.B., dass mit Farbqualität wesensnotwendig Ausdehnung verbunden ist. Systematische Anwendung der Wesensschau liefert apriorische Wissenschaften von Wesenheiten, „eidetische“ Wissenschaften. Wesenheiten habe als solche keine Realität, sondern ideales Sein; aber die Welt dieser überzeitlichen, idealen Wesenheiten ist in ihren gesetzlichen Zusammenhängen von uns unabhängig. — Husserl verknüpft seine Lehren neuerdings mit neukantischen Gedanken.

Selbständige Vertreter der phänomenologischen Richtung sind der Logiker und Psychologe Pfänder und Geiger, der sich hauptsächlich der Aesthetik und der Philosophie der Mathematik widmet.

Nach Scheler's emotionalem Intuitionismus sind die Werte objektive Qualitäten, die in fester Rangordnung ein „Reich der Werte" bilden, dessen höchste Stufe das Heilige darstellt. So weist Scheler's Wertlehre schon auf seine „materiale Wertethik" und phänomenologische Religionsphilosophie hin. —

Rehmke's Grundwissenschaft verwirft die traditionelle Erkenntnistheorie mit ihrem Problem, wie das Erkenntnissubjekt zu seinem Objekt kommt. „Gegebenes schlechthin," das Bewusstseinsbesitz ist, bildet den Gegenstand des Erkennens. Die Wissenschaft soll das Gegebene „fraglos" bestimmen. Die „Grundwissenschaft" nun hat es mit den allgemeinsten Bestimmungen des Gegebenen zu tun; darum ist sie grundlegend für die spezielleren Wissenschaften. Sie vollzieht fundamentale Unterscheidungen im Gegebenen, wie die des Einzigen und Allgemeinen, und erschliesst weitreichende Konsequenzen aus denselben. —

Der stark vertretene kritische Realismus nimmt an, dass eine „Aussenwelt-an-sich" unabhängig von unserem Bewusstsein existiert, die in gewissen Grenzen erkennbar ist. Ohne die Annahme von Aussenweltsgegenständen-an-sich, die unsere Sinneswahrnehmungsbilder hervorrufen, bleibt deren Auftreten unverständlich. Wenn aber die Wahrnehmungsbilder durch Aussenweltsobjekte-an-sich hervorgerufen werden, dann kann man von jenen auf diese schliessen und sie in gewissen Grenzen erkennen. Becher vertritt in Anlehnung an die wohlbewährte naturwissenschaftliche Aussenweltsauffassung einen „geläuterten physikalischen Realismus," den er weiterhin dynamistisch und psychistisch ausgestaltet: Die Aussenwelt besteht aus (vermutlich) seelischen oder seelenartigen Kraftkomplexen.

Der kritische Realismus verbindet sich harmonisch mit dem Objektivismus, der das Wesen der Wahrheit in der Uebereinstimmung der Erkenntnis mit ihrem Gegenstande (Sachverhalte) erblickt. In dieser Wahrheitsauffassung berühren sich kritische Realisten und Phänomenologen, deren Lehren sich vielfach verknüpfen.

Viele kritische Realisten vertreten die Möglichkeit einer empirischinduktiv verfahrenden Metaphysik. Die neuscholastischen Denker (Dyroff, Geyser u.a.) bauen eine theistische Weltanschauung aus.

Hartmann sucht auf allen Gebieten ontologischen Grund zu gewinnen — im Sinne des Aristotelischen „Seins als Sein." In der Erkenntnistheorie führt das zu einer Neuaufrollung des Transcendenzproblems und zu einer Metaphysik der Erkenntnisbedingungen. In der Ethik bedeutet es die Aufdeckung und Analyse einer an sich bestehenden Wertsphäre, einer Synthese der Kant'schen Pflichtethik mit der inhaltlichen Wertvielheit der Antike.

Häufig ist das metaphysische Problem des Zusammenhanges von Seele und Leib bearbeitet worden. Eine Zeitlang war die Parallelismuslehre, später die Wechselwirkungshypothese vorherrschend.

Mit der Wechselwirkungslehre hängt der Vitalismus eng zusammen, der gleichfalls in jüngster Zeit wieder erstarkt und dem biologischen Mechanismus eindrucksvoll entgegengetreten ist. Bannerträger des ,,Neovitalismus" ist Driesch, der die Lehre von der ,,Autonomie" des Lebens und der ,,Entelechie" als spezifischem Vitalfaktor z.T. auf eigene sehr bedeutsame zoologische Experimente gestützt hat. Er hat diese Lehre erkenntnistheoretisch unterbaut, mit einer ,,Ordnungslehre" (Logik) verbunden und mit einer Metaphysik überbaut, die unter anderem das Freiheits- und das Gottesproblem behandelt.

Der Psychovitalismus lehrt, dass die spezifischen Lebensfaktoren von seelischer Art sind. Wie seelische Faktoren uns führen und zur Produktion von Zweckmässigem (z.B. Werkzeugen) befähigen, so mögen sie überall im Lebensgeschehen einen führenden und vereinheitlichenden Einfluss ausüben und ebendadurch die Zweckmässigkeit, überhaupt die Eigenart des Lebendigen hervorbringen.

Weiterhin weist Becher auf die ,,fremddienliche Zweckmässigkeit" hin, d.h. darauf, dass manche Organismen fremden Lebewesen selbstlos und zweckmässig dienen. Dies erklärt er durch die Hypothese, dass ein überindividuelles Seelisches über den verschiedenen Organismen führend und verbindend waltet. Dasselbe mag die Entwicklung des organischen und geistigen Lebens leiten und sich dabei selbst entwickeln; es mag im Gewissen und in selbstloser Liebe wirksam sein. Vielleicht stellt die Gesamtwirklichkeit eine Hierarchie seelischer Realitäten dar, in der über Elektronen-, Atom-, Molekül-, Zell-, Organ-, Organismus- und Volksseelen ein höchstes Seelisches führend und vereinheitlichend steht.

Dieser Auffassung ist Stern's Personalismus verwandt. Person ist aktive, zielstrebige Einheit; Sache ist passives, mechanisches Aggregat. Der mechanistischen Sach-Betrachtung der Welt ist die teleologisch-personalistische überzuordnen. Auch Atome, Moleküle und Zellen sind als Ganze betrachtet Personen. Diese konstituieren die gesamte Wirklichkeit, wobei sie eine Hierarchie bilden. So stehen über den Atomen, diese zur Ganzheit verbindend, die Moleküle, über den Molekülen Zellen, über diesen Organismen, über den Einzelmenschen die Familienpersönlichkeit, darüber die personale Volkseinheit, über ihr der werdende Menschheitsorganismus und endlich die allumfassende göttliche Person, welche die ihren Zwecken entsprechenden Gesetze dem Gesamtwirklichen auferlegt. Das Weltgeschehen ist die schöpferische Selbstentfaltung der Allperson.

Hier sei auf die Annahme eines werdenden Gottes bei Schwarz hingewiesen.

Müller-Freienfels betont die irrationalen Seiten der Welt, die wir durch intuitive Einfühlung und im Instinkt erfassen. Als irrationales Faktum erscheint ihm die Individualität. Den Begriff der Individualität wendet er auch auf unter- und überpersönliche Tatbestände an, für deren metaphysische Ausdeutung er einen dem Leibniz'schen verwandten vitalistischen Dynamismus vertritt. —

Eucken's aktivistische Philosophie trägt lebensreformatorischen, antinaturalistischen Charakter. Damit unser Leben höheren Sinn gewinne, muss sich übersinnliches Geistesleben in uns über die Natur erheben. Dieses muss, soll es objektiven Wert besitzen, einer höheren, metaphysischen Wirklichkeit entquellen. Solches Geistesleben manifestiert sich als freie Tathandlung, als ethische Aktivität, die den „Haupterweis" der Religion darstellt.

Noch mehr als die Eucken'sche hat die Philosophie des Grafen Keyserling den Charakter der Lebensreform, der Weisheit, der Kunst der Lebensgestaltung angenommen.

Dilthey's Lebensphilosophie trägt geisteswissenschaftliches Gepräge. Sie geht vom „Erleben," vom Ganzen des seelisch-geistigen Lebens aus. Im Leben der Individuen, in ihren irrationalen Lebensstimmungen und historischen Lebenssphären wurzeln die Weltanschauungen und ihre Typen. Dilthey verzichtet auf das Erringen einer absolut gültigen Weltanschauung zugunsten des psychologischen und historischen Verstehens der einzelnen Philosophien und ihrer typischen Formen. Das Verstehen fusst auf unserem eigenen Erleben, führt uns aber darüber hinaus in's Ganze des Geisteslebens. Zweckgestaltungen, teleologische „Strukturzusammenhänge" des seelisch-geistigen Lebens soll die beschreibende und zergliedernde geisteswissenschaftliche Psychologie erfassen, die Dilthey der kausal erklärenden entgegenstellen will.

Von Dilthey ist Spranger angeregt, der die Grundlagen der Geschichtswissenschaft untersucht, eine Geschichts- und Kulturphilosophie aufbaut, eine geisteswissenschaftliche Psychologie durchführt und auf diesen Fundamenten seine Pädagogik errichtet. Spranger will das Seelenleben in seinen typischen Ausprägungen teleologisch verstehen aus den Werten der Wissenschaft, Kunst, Politik, Religion usw., auf welche die verschiedenen Seelentypen in ihren spezifischen Strukturen hin orientiert, für die sie zweckmässig gestaltet erscheinen. Die grossen Kulturwerte, die seelischen Strukturen der diesen Werten teleologisch zuzuordnenden Menschentypen und die diesen Werten und Typen angemessenen menschliches Lebensformen entsprechen einander. Gewisse seelische Strukturzusammenhänge sind apriorisch als wesensnotwendig erkennbar. Die teleologischen Seelenstrukturen und ihre Angemessenheit an die Werte aber setzen voraus, dass diese Werte eben strukturbestimmend wirken, dass sie eine bestimmende metaphysische Macht repräsentieren. So führt Spranger's Typenpsychologie über Dilthey's relativistischen Historismus hinaus zu einer Kulturwertmetaphysik hin.

Simmel zeigte ursprünglich positivistische, evolutionistische und pragmatistische Tendenzen. Seine Moralwissenschaft trägt nichtnormativen, psychologisch und soziologisch beschreibenden und analysierenden Charakter. Die Soziologie ist ein Hauptarbeitsgebiet Simmels. Seine kantianisierende Erkenntnistheorie der Geschichtswissenschaft will dartun, dass diese nicht einfach die erlebte Wirklichkeit nachbildet, sondern sie durch gedankliche Formungen, durch Auswahl, Synthese, Wertung usw., erst zur Geschichte gestaltet. Schliesslich will Simmel's Lebensphilosophie das schöpferischströmende Leben in seiner Gestaltenfülle, aber auch das Ueber-sich-selbst-Hinausgreifen des Lebens in seinen Zielen erfassen, die ihm Sinn und Wert geben.

Spengler's intuitionistische Geschichtsphilosophie stellt der kausalen, mathematischen Gesetzmässigkeit der toten Natur eine organische Schicksalsnotwendigkeit der Weltgeschichte gegenüber. Letztere zeigt eine Vielheit von Kulturen, deren jede einen individuellen Organismus darstellt. Die vergleichende Kulturmorphologie erfasst die Physiognomien und Seelen der Kulturen, deren Inhalte durchaus relativen Charakter tragen; es gibt z.B. keine für alle Kulturen gleiche Mathematik. Analogien im Lebensablaufen zeigen den nahenden Untergang des Abendlandes an.

Möge die Philosophie der Zukunft, der unsere Mühen und Hoffnungen gelten, durch sicheren, jugendstarken Aufstieg die düstere Untergangsprophezeiung widerlegen.

PHILOSOPHICAL TENDENCIES IN JAPAN

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IT is a great honor for me to speak before this learned body. But, as I have not been able to prepare a special scientific paper or to say anything concerning my own philosophical opinions, I have decided to seek to carry out my mission by speaking briefly on the present philosophical tendencies in Japan. Even on this subject, I must chiefly limit the sphere of my remarks to a general survey of the influence of Occidental philosophy upon Japanese scholars and the general public interested in philosophy. For, though, of course, I have learned something about Oriental philosophy and I can detect some creative spirits in the present philosophical movement, I make Occidental philosophy my special subject of study, and so think it proper to speak on that subject at first. I shall later refer to the general state of philosophical study.

The task of reporting the contemporary state of philosophical study seems rather an easy one at first sight, but in fact it is quite the contrary. As is well known, one cannot be at the same time an actor and a spectator and a critic. The historian of a contemporary literary movement of which he is one of the factors can scarcely boast of impartiality. So I cannot help giving a subjective interpretation colored with my own views and inclinations, although I strive to be as objective and impartial as possible. With these apologies let me proceed to my task.

I

The first philosophical system that was introduced into Japan was that of the Anglo-American line. As history shows, Western civilization was known at first from its material side. Some four centuries ago, guns and rifles had been brought into Japan by the Portuguese. Afterwards many articles were imported by Portuguese, Spanish, and then by English and Dutch merchants. Even religion, though it had produced many firm believers and even several martyrs, was sometimes treated by the governing classes or the feudal lords as a means of commerce, not but that the missionaries had also done the same thing.

But by and by the study of how to produce the articles imported by commerce attracted the attention of some scholars, especially physicists, and thus physical sciences were gradually introduced into Japan. Hence it is very natural that the philosophical doctrines intimately related to these sciences incidentally became known. Thus we may conclude that even in the latter part of the Tokugawa period, i.e., in the middle of the nineteenth century, some philosophical doctrines, chiefly naturalistic or materialistic, probably were studied by some physicists, and also by some politicians and lawyers. But the study of philosophical theories, properly so called, is to be traced to a more recent time, namely, to the beginning of the Meiji period, i.e., since about 1870. The philosophy of that time was Anglo-American.

The scholars and statesmen of the earlier Meiji period had generally been educated in the Chinese classics which often taught the unity of politics and morals as the highest ideal of life and regarded the study of morals as the noblest and fittest for the leader of society. Thus, when those scholars began to learn Western sciences, the themes in which they were deeply interested were, as might be expected, of a practical nature. The philosophical systems mostly related to these subjects were also chiefly introduced. Moreover, a new philosophy naturally stands in opposition to older thought. The current thought being, as we have said, Confucianism and Bushido, which laid stress on the spiritual side of man, the reform would come from a philosophy which had more realistic interest. Thus the utilitarianism of Bentham and Mill, the evolutionism of Spencer and Darwin, and many Anglo-American philosophical sciences, i.e., psychology, pedagogy, ethics, etc., were the prevalent topics at that time. Some scholars who at the same time were also statesmen or men of affairs, even went so far as to translate many works of these philosophers, and sought to apply their theories in practice. It was owing to these scholars that many philosophical terms were coined and put to use; the word for "Philosophy" itself, i.e., "Tetsugaku," was used first at that time, by Nishi, who had also translated many works on psychology, logic, etc.

But if we are to describe the general state of early philosophical study more accurately, we may distinguish two stages of that study. The English philosophers of the early part of the nineteenth century, Bentham and Mill, were first introduced and became predominant in practical circles and among private scholars, among whom I may mention Fukuzawa, the pioneer of new culture in Japan, who founded a private college in the beginning of the Meiji period which has now grown up into an important private university. On the other hand, in official academic circles, i.e., among those who were members of the Imperial University, the later English thinkers, Spencer and Darwin, were ardently studied. This is said to have been initiated by an American zoölogist, Professor Morse. Meanwhile, the significance of Bentham and Mill was not unrecognized. Again, among the evolutionists, we may distinguish two schools: the one, that of the Spencerians (represented by Professor Toyama, who was long professor in the University, then President, and Minister of Education), and the other, that of the German evolutionism of Haeckel (represented by Dr. Kato, who was long President of the University, then Private Councillor, and who long held the position of dean among scholars).

However, in the Imperial University at Tokyo, which was the sole university in Japan until the end of the nineteenth century,[1] other philosophical doctrines were also taught by English, American, German, and Japanese professors. It is said that Cooper, an English professor, lectured mainly on Kant and that Fenellosa, an Italian-American scholar and at the same time an art-critic of great ability, had awakened students to the study of Hegel; but it is not certain, as far as I can judge, in what degree these ideas were understood by people in general at that time. Then about 1890, Dr. Busse, who afterwards became professor in the University of Königsberg, had emphasized the importance of the study of the history of philosophy and lectured on Kant and Lotze in particular. As the successor of Professor Busse, there came in 1894 Professor R. von Koeber, a Russian subject of German descent, who taught some twenty years in the University at Tokyo. He promoted the study of Occidenta philosophy and aroused a real interest in philosophy among studentl and the general public. Greek and German philosophy were the favorite themes of this teacher, who was much influenced by Schopenhauer and von Hartmann, with a predominance of mystical color. I myself began to study philosophy under him in 1894, when he was first invited to the University.

Now, if you allow me to turn to my personal experience, which may be an aid in understanding the philosophical development, I may mention my professors: Dr. Toyama, the Spencerian; Dr. Motora, the psychologist and empiricist; Dr. Nakashima, the professor of ethics, who introduced English neo-Kantianism; Dr. Inouye, now emeritus-professor, who lectured on German and also on Oriental philosophy, thus endeavoring to establish an independent idea by synthesizing Eastern and Western thought.

Thus in the nineties, English empiricism and Continental rationalism had both been introduced and studied by all scholars. Since that time the philosophy of the rationalistic schools, both Continental and English, has gradually gained power and the philosophy of Spencer and others has been almost forgotten by the students of the younger generation. At the same time the study of Oriental philosophy appeared with new garments and the demand for independent thinking was made on several sides. But I shall speak of this later.

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[1] We now have six Imperial Universities and many other private universities.

The rise of pragmatism at the beginning of this century, and its later development, also had its effects among us. Some compare this philosophy of action to the Chinese philosophy of Wan-Yan Ming, who also held that true knowledge should be identical with action, but who constructed his theory in a somewhat metaphysical way. Many articles have been written on this subject; I myself wrote a critical exposition of the doctrines of Professors James, Dewey, Schiller, and others. So in 1908, when, at the third meeting of this Congress at Heidelberg the discussions concerning this doctrine became heated, I was there and heard them with great interest.

Pragmatism is not without followers among academic scholars; but in general those who had been most interested in this theory were among the scholars who make education and other practical activities their professions. Perhaps it is unnecessary to add that Professor Dewey came to Japan in 1920 to give lectures in the Imperial Universities and to the public.

Besides pragmatism and other new forms of American and English philosophy, such as the new realism and allied systems, several philosophical schools in other countries were successively popular in wide circles. Pragmatism being rather positivistic, in natural reaction idealistic thought took its turn as the central idea. It was owing to this circumstance that the philosophy of Eucken became very popular. Though his philosophy itself had long before been studied by scholars, many English translations made it accessible to the non-scholarly public. After some time, the thought of Bergson caught the minds of many people. That this philosophy emphasized the power of intuition and somewhat depreciated the value of modern sciences found a welcome among those who cherished an antipathy against science and logic, especially in literary circles. Of course academic philosophers also studied this philosophy and regarded it as brilliant and suggestive; but some were not contented with its emphasis on the anti-scientific spirit. Hence the eyes of philosophers turned to a more logical system, that of the neo-Kantians in Germany.

As already said, since the end of the last century most philosophers have been interested in idealistic and rationalistic metaphysics. But at first these systems were known chiefly in their general features, so that their similarity was noticed more than their differences, the same condition as was seen in the beginning of English neo-Kantianism, when Coleridge, Carlyle, and Emerson in America, had introduced German philosophy to English or American readers. Even later neo-Kantians, who were also neo-Hegelian, neo-Fichtean, etc., failed to make accurate discriminations, for they had been eager to bring the new idealism and metaphysics into the land of empiricism and had no spare time to distinguish minute differences. Later investigation became more precise. Historical and philological interest was aroused. Men were no longer entirely satisfied with general interpretations. Thus the real study of philosophy as a science may be said to have made its appearance by this time, i.e., the end of the nineteenth or the beginning of the twentieth century.

As results of this historical study we have at first authentic translations of many classical works and critical expositions with scientific value. Among those classics, the most predominant is naturally Kant, for one must, it is often held, study the critical philosopher as the source and origin of all contemporary philosophy, whether he may agree with him or not. Of the works of Kant, as might be easily imagined, the *Critique of Pure Reason* has been very widely known and studied by all students; but the *Critique of Practical Reason* and other works have been also read by many. Most of them are already translated or promised for translation. On the occasion of the two hundredth anniversary of his birth, many essays and books were published, not to speak of many lectures given in several philosophical associations in honor of the memory of this reformer of modern philosophy. Besides Kant, many other modern philosophers and also some ancient philosophers, such as Plato and Aristotle, have also found their translators and propagators.

Other fields have also attracted attention. Logical and epistemological problems have become familiar themes. The critical philosophy is being investigated accurately according to the logic of the later German neo-Kantians. I say "later" for the earlier neo-Kantians were often condemned on account of their psychologism, while the students of epistemology are generally strict followers of anti-psychologism or logicism. Thus almost all the chief works of the neo-Kantians, i.e., of the school of Cohen and Natorp (the so-called Marburg school), of that of Windelband and Rickert (the so-called Southwestern school), and of many other schools, are assiduously studied and very many of them are being currently translated or interpreted. Besides these, many other important schools, especially the phenomenology of Husserl, are well known among young scholars; many of them having recently studied under this reformer of philosophy. Again, the works of Brentano, Bolzano, and of Lipps, etc., i.e., the so-called Austro-German school, and other prominent schools are also known and have found their exponents. Some have criticized the one-sidedness of their studies; but these criticisms unfortunately often arose from ignorance of the new movements.

But some are not satisfied with this too theoretical investigation. Already the followers of phenomenology are opposing neo-Kantianism. Also many other German schools, especially those of Dilthey and his followers, and of Driesch and *Weltanschauungsphilosophie*, etc., are finding translators and interpreters. Many have studied the philosophers of other lands who are allied with the so-called *Lebensphilosophie:* Bergson and other French philosophers; Croce, Gentile, and other Italian philosophers; Soloview, Loskii among Russian thinkers. Nor with the rise of neoscholasticism was the study of this part of philosophy and allied ideas in Spain and Italy wholly neglected.

This is only a survey of one part of the general philosophical discipline. In the other phases of philosophy in the wide sense, i.e., psychology, ethics, sociology, etc., one will find many different schools, chiefly empirical, under English and French influence.

II

With the above description of foreign influence, let us consider briefly the contemporary native Japanese philosophical movements. Many scholars, professional and non-professional, have undertaken to establish systems of original ideas. To arrive at this end there may be two methods, immediate and mediate. The former often appears in an unscientific form, — a statement of a few new ideas, which are mostly practical rules of life. This method is first, intuitive instead of discursive; secondly, synthetic instead of analytical; thirdly, practical instead of theoretical. Those thinkers who claim originality for their ideas generally hold that Eastern culture has a dominance of spirituality over Western civilization, which has made great progress on its material side. Some would even go further and deny the worth of Western mechanistic civilization, seconding and seconded by some Western thinkers. But there are not a few who judge more impartially and wish to synthesize the two types of culture, seeking uniqueness for their ideas by laying stress on the Oriental way of thinking.

On the other hand there is the mediate way of seeking originality. By this I mean that in a scientific or systematic form, and as the result of this mediating process or methodical preparation, one often misses the end of attaining originality. This is a point at which men of science are often reproached by people in general and literary men. Of course there are some "mediate" systems which are worthy of being called original to some extent. But, as there is nothing new under the sun, this originality must have its source somewhere, which is sometimes Occidental philosophy, but is chiefly Oriental philosophy. Thus in either case, Oriental philosophy has played an important rôle.

Now the meaning of the words Oriental philosophy is not at all simple, and the end of the study of this philosophy is also not simple. There are the two great lines of Indian and Chinese philosophy. Indian philosophy is very closely related to religion, the ancient Brahmanism or Buddhism. These different religious systems are also different in their ways of viewing the world; but we may characterize them in general as subjective, idealistic, and metaphysical. The Chinese philosophy also has many features; but in general it is objective, realistic, and empirical. The spirit of the Japanese people is very much like that of the ancient Greeks. This native spirit, modified by the influence of two ancient philosophical systems, has produced a unique culture, which from its sources can be divided into two tendencies: empirical and metaphysical. But before proceeding to a delineation, I must explain briefly the meaning of this opposition of philosophical standpoints.

If we select one point of view as the standard for classification and divide all philosophical schools into two, the empirical or positivistic and the rational or metaphysical (to which we may add the critical philosophy as the intermediate or synthetical attitude), we can trace the rivalry and successive predominance of these schools in all ages and countries as a dialectical movement. We can find this movement in Oriental philosophy. In general, Chinese philosophy is the exponent of positivistic ideas and Indian philosophy is metaphysical. But within these two schools there are many differences. The orthodox Chinese philosophy, Confucianism, was positivistic in its origin; but later it acquired a metaphysical interpretation, mingled with other ideas of Chinese philosophy, e.g., Taoism and the Indian philosophy or Buddhism. Taoism itself was mixed with Buddhism and became a degenerate form of religion, but the essence of its doctrine, as taught by Lao-tse, its founder, is metaphysical and very much like Greek (and other) mysticism. On the other hand, while the ancient Indian philosophy was generally metaphysical or idealistic, Buddhism, as an attempt at reform, was in one sense empirical; but later this was developed into a metaphysical theory, and is now generally regarded as the representative of a profound metaphysics. However, when minutely examined, we can find many deviations among Buddhists; i.e., some sects are rather positivistic and some mystical and some even rationalistic.

Now all these doctrines came to Japan at an early date and joined with the native ideas which were rather empirical and anti-rationalistic. Thus the old doctrines themselves before Occidental philosophy was introduced, were already heterogeneous. But if we search for common factors in the prevalent ideas at the time of the introduction of foreign culture, we may say that they are idealism from a theoretical viewpoint, but realism from a practical viewpoint. Thus, as already remarked, the new empirical philosophy attracted attention at first. This was in one respect the counterpart of previous ideas, but in another respect, the continuation and development of related native ideas. No wonder that the empirical philosophy has given way to the opposite school, also connected with allied native ideas. One often criticizes submission to foreign ideas and I fear that, by describing foreign influence too much, I shall be regarded as failing to appreciate the scholarly originality of my fellow-countrymen. But, I believe, the foreign ideas are assimilated with the same ideas which exist in a different form in Japanese thought. Thus in considering the effects of the new Occidental philosophy, I may say I have at the same time explained current Japanese thought.

Of course, when we say that some ideas are predominant, that does not at all deny the existence of other ideas. Thus there will always be conflict and confusion in the world of ideas; but that is rather a sign of the life of the ideas. And I may go further and insist that the philosophical movements of the world are all one and the same, differing only in the quantity and form of their elements. This reminds me of the doctrine of Leibniz; the monads are all identical in their contents, differing only in the degree of clearness and distinctness.

LA PHILOSOPHIE EN FRANCE ET LE MOUVEMENT SOCIOLOGIQUE

(*Abstract only*)

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LA philosophie en France au XX° siècle semble s'alimenter à trois sources principales: 1° réflexions critiques sur la science, ses résultats, ses postulats (tradition de Cournot, continuée par H. Poincaré et G. Milhaud); 2° Effort pour retrouver dans sa pureté la realité vivante de la conscience (tradition de Maine de Biran, continuée par Bergson); 3° Efforts pour systématiser les acquisitions des sciences sociales et dégager les consequences de leur progrès (tradition d'Auguste Comte, continuée par Durkheim et son école).

Cette dernière entreprise tend à renouveler (a) la psychologie, (b) la théorie de la connaissance, (c) la philosophie des valeurs.

(a) *Renouvellement de la psychologie.* — La part du social non seulement dans l'expression des sentiments (Dumas), mais dans leur spiritualisation (Paulhan). L'état d'esprit du primitif expliqué par la prédominance des représentations collectives (Lévy-Bruhl). Les maladies mentales présentées comme une sorte de désocialisation (Blondel). La mémoire appuyée sur des « cadres sociaux » (Halbwachs). Comment les consignes collectives aident à l'affermissement de la volonté personelle (Blondel).

(b) *Renouvellement de la théorie de la connaissance.* — Le sociologisme, attirant l'attention sur les origines sociales des concepts et des catégories de la raison elle-même, prend une position intermédiare entre l'innéisme et l'empirisme (Durkheim). Quelle part il fait au pragmatisme.

(c) *Renouvellement de la philosophie des valeurs.* — L'objectivité relative des jugements de valeur, distincts des impressions, des préférences personelles rattachées au fait ou'ils traduisent les aspirations d'une collectivité. — Applications au problème du droit. L'évolution du droit expliquée et l'autorité du droit justifiée par les transformations de la conscience collective (Davy, Fauconnet). — Applications au problème de la morale. La science des mœurs et l'art pratique rationnel (Lévy-Bruhl: et A. Bayet). La part de la sociologie dans l'enseignement moral (Lapie). Résistance du rationalisme et de l'utilitarisme (Parodi, Belot).

THE DOCTRINE OF MĀYĀ: SOME PROBLEMS

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IT is a common belief in the West that Hindu thought regards the world as an illusion we have to escape from. The Hindu, it is asserted, sees no meaning in life and no significance in history. The world of time is but a passing show. I propose in this discussion to show that such a view is not fair either to the general tendency of Hindu thought or even to Śaṅkara's metaphysics with which the doctrine of māyā is associated.

The Ṛg Veda is realistic in its whole outlook. Assuming that causes abide though their effects flow, it argues that there are permanent forces lurking behind the shifting processes of nature. Dyaus, the Sky, is the permanent background, whereon many passing shapes of light and shadow, of cloud and storm, of mist and sunset glow are projected. The recognition of the principle of the uniformity of nature and the natural instinct of the mind to worship one God, resulted in the reduction of the many deities to the one reality: Ekam Sat. The predominantly cosmic view of the Ṛg Veda was supplemented by the inner psychological vision of the Upanishads. The one ultimate reality dwells in the sun beyond and the soul within. The illustrations of a musical instrument and its notes, the substances of clay and gold and the things made of clay and gold are intended to show the dependent and derivative character of the world. There is nothing to suggest that the world of things is the creation of disordered minds. Buddhism felt itself called upon to repudiate the compromises in which the Upanishads indulged. Buddha emphasized the dynamic character of all being. A tendency to dissolution is inherent in everything. The individual is a constantly changing composite. There is no self, no person, but a continuous stream of energy in action like the continuous flowing of the river or the continuous burning of a flame. The identical "I" is not, never was, and never will be. While Buddha himself did not give any definite answer to the question whether there was anything behind the appearances, some of his followers went to the extent of saying that there was nothing behind appearances, not only nothing for us but nothing at all. The Hindu thinkers were glad that they could identify Buddhism with a negative metaphysics. The orthodox Hindus could not excuse Buddha for his opposition to their ceremonial code.

Every dissenter is an atheist and Buddhism was set aside as false metaphysics and false ethics.

Śaṅkara took up the question at this point. He accepted the fundamental position of Buddhism that the thinking subjects and the objects of thought are all governed by the law of change. But this passing flow is not all. The effort to escape from the limits of the finite implies the consciousness that the finite is not all. When we deny something as unreal we do so with reference to something as real. Even if the world be a shadow, there must be a substance of which it is the shadow. Śaṅkara argues that there must be a basis for even imagined entities.[1] Thus Śaṅkara reinstates the view of the Upanishads.

What is the status of the world on Śaṅkara's theory? He does not assert that objects are made or constituted by the mere fact of being known. He repudiates the subjectivism of the Buddhists, that objects rise into being when we perceive them and disappear again when we do not. Knowledge and its object are not identical. Differences in mental activities correspond to but do not create differences in objects. We perceive objects and not merely apparitions. Śaṅkara distinguishes dreams from waking experiences and argues that, while dream experiences are sublated by those of waking life, the latter are not sublated in any other state of logical experience.[2] Śaṅkara is a radical realist, admitting the distinction of empirical subjects and objects. Logical truth must follow reality and mould it.[3]

Śaṅkara affirms a monism when he reasons the metaphysical question of the relation of empirical subjects and objects. The two hang together; the principles of experience are adjusted to the make-up of the human mind. The space-time-cause world is adapted to the human mind with its tendency to envelop the objects of knowledge in these forms. Their kinship is indicative of a common source. The individual selves and the empirical objects are described as phases of the universal spirit (ātmana eva dharmāḥ). To regard the dualism as ultimate is wrong. The truth of things is nondual.

Śaṅkara brings out the relativity of the world by a critical examination of the limits of human knowledge. Knowledge is bound up with duality, for anything becomes an object only when we think of it as having a place in the space-time world. Our thought seeks to know the real. It can do so only by relating the real to something else. We refer this or that character to it in knowledge. Not one of them is adequate to the real. We equate the real with something different from it, i.e., the nonreal. This is called adhyāsa.[4] Again, our knowledge is motived by practical interests and in this respect is not different from the kind of knowledge possessed by animals.[5] The relation between consciousness and its object is difficult to define. The dualistic world is relative to our empirical vision. The avidyā (ignorance) to which it is traced is not mine or yours. It is not a subjective affection but a cosmic force.[6] The world of multiplicity happens to us normally and constantly. Śaṅkara would agree with the modern realists in assuming the actual objective existence of everything that is presented in knowledge independently of the act of knowing, though the form in which objects are presented to us in knowledge depends rather on physiological and psychical than on physical conditions. It is not destroyed on the acquisition of true insight; for then when the first individual attained release, the world should have passed out of existence, which is not the case.[7] It is not the presence or the absence of the pluralistic universe that counts in mokṣa or realization as our attitude to the world. Vidyā and avidyā represent the true and the untrue outlooks. When the illusion of the mirage is dissipated by scientific knowledge, the illusion stands there, though it is no longer able to tempt us. When the false outlook is corrected, the oneness of the world is realized. Oneness really means nondifference.[8] The world has no separate being apart from or independent of its underlying cause.

Māyā in Śaṅkara signifies the kind of existence which the world has. It is not eternal reality, it is not mere fancy, but has a status intermediate between the two. Its nature as endless becoming is emphasized by Śaṅkara. The real is that which persists for all time, past, present, and future,[9] but the actual is always tending to pass beyond itself to something else. Whatever begins ends.[10]

I may perhaps develop Śaṅkara's suggestive idea in my own way. The world is an historical process. It is the working out of a purpose through various incomplete stages toward completion. In this process called saṁsāra, each movement contains all its predecessors and is built on them. The historical particular reaches its end when it attains its destiny. Progress involves some objective to be realized, some purpose that is to be accomplished through change. Release is the realization of this ideal when the particular ceases to be bound to the historical plane. Mokṣa is freedom from historicity or temporal process or birth and death which are the forms of time. Historicity ceases with realization.[11]

While Śaṅkara often asserts that the individual lapses into the Absolute, when he realizes mokṣa, there are passages where he suggests that they retain their individualities as long as the world process continues. The released souls at the moment of release do not pass into the stillness of the Absolute but secure a steady vision of the oneness of all.[12] Many liberated souls (samadhigata sakalavedārthāḥ), as Apāntarartanas, Vaśiṣṭha, Bhṛigu Sanatkumāra, Dakṣa and Nārada, are spoken of as assuming new forms not as the result of their past karma but of their free will (svātantryeṇa) in order to fulfil their specific functions in the economy of the world. The freed souls retain their individualities until all are saved. If we say that all will never be saved and the world will never reach its end, it only means that the travail of the creative process is endless and the freed souls have something to live for, viz., the redemption of the unredeemed. The individualities will be dissipated only when the world process terminates. Until then all manas will live as individuals. "Nor at any time verily was I not, nor thou, nor these princes of men, nor verily shall we ever cease to be hereafter." No one can be saved until all are saved.

A later follower of Śaṅkara, Appaya Dīkṣita, argues in the last chapter of his *Sīddhāntaleśasaṅgraha* that Śaṅkara allows the maintenance of individuality until all individuals are liberated. The freed soul attains in understanding to divine universality, but is strictly limited as a center of action, though all his action is inspired by profound insight. He retains his condition of inner equilibrium in spite of changing external circumstances, but he will find existence in heaven intolerable so long as there is one single being who does not get there. But when every historical individual gains his end, the world purpose is fulfilled. The world escapes from the historical, i.e., it will pass away. When the multiple values in which the infinite life figures itself out in this world are realized, there is nothing more to be done. History has meaning only so long as there is travail or creative process. The consummation of world-purpose means the realization of all values. The world will not pass away until all values are realized, i.e., when all historical particulars receive their fulfilment. The world fulfils itself by self-destruction.

There are some who regard such a consummation of the world with grave dissatisfaction. Such a view seems to them to make the world of experience a thing of naught, an evil dream from which we have to escape one day. It cannot be that God lights the fires of spiritual life only to reduce them to ashes. So they tell us that the perfected individuals dwell in heaven, enjoying the glory of God. An English hymn describes heaven as a place "Where congregations ne'er break up and Sabbaths have no end." Whatever it may be for us laymen, it is certainly not heaven for ministers of religion. If what awaits us is eternal idleness, it is of no use to us or to God.

I may remind you of the "soda water paradise" of Chautauqua which wrung from William James the cry, on emerging once more into the dark and wicked world, "Ouf, what a relief! Now for something primordial and savage, even although it were as bad as an Armenian massacre, to set the balance straight again." We cannot stand an eternity in heaven, doing nothing. Aristotle says, "Endless duration makes good no better, nor white any whiter." To avoid this contingency, sane thinkers hold that the historical process of the world will never cease. In other words, the purpose of the world will never be realized. So long as we look at things through the medium of time — and we cannot do otherwise — we have to admit that there is no beginning for the world and that it exists from everlasting to everlasting.

But this view ignores the eternal background of the temporal process. It cannot be a question of perpetual traveling: we should also arrive. It cannot be interminable singing: there should also be such a thing as completion in a song. There will come a time when all individuals will become sons of God and be received into the glory of immortality. If we look at the past we see that the world has been moving towards its end in spite of tragic failures and long periods of stagnation. If we take a long view of history on earth, we see that the lives which have risen high suddenly drop, but only to yield to other lives. If our present civilization proves to be some blind alley like some of those in which men lost themselves in the past, we may be sure that some other civilization more forceful and more adequate will have arisen erelong in its place. An eternal purpose guides and informs the race to the highest good. All things are one in their being and origin, one in the general law of their existence, one in their interdependence, but each realizes this unity of purpose and being on its own lines. All mankind has one destiny which it seeks and increasingly attains in the progress and retrogression of the countless milleniums of history. The realization of this destiny is the end of the world when all beings and all worlds are resolved together in one equal and inseparable stillness.

We need not think that when this world process comes to a close, it is again repeated from start to finish. God would not say to his courtiers, to use the sarcasm of Anatole France, "That was a good play, let us have it over again." There is no need for such dull monotony. God is infinite possibility. When the curtain drops on this drama, another possibility, another plot, another drama will commence.

What is the relation between God and the actual world process?

I am inclined to agree with Śaṅkara's answer to the question that the relation between the Absolute Spirit and the changing multiplicity is an incomprehensible one. The question is illegitimate since it assumes a distinction between the two. There is nothing other than the Absolute and yet the Absolute is not the mutable world. The Absolute is present in all things but unconfused. The world rests in God but how we do not know.

Any attempt to explain the relation between God and the world leads to an *impasse*. To say that the infinite spirit creates the finite is to assume that the infinite spirit is attacked by the limitations of time. If God is regarded as the cause of the world, the child's question, "Who made God?" cannot be answered. It is difficult to know how the finite conditioned world is caused by an infinite unconditioned being. We cannot say that the Absolute manifests itself in the finite for the finite cannot manifest the Absolute. Nor can we distinguish between the being and its manifestation. If we say that the world is a transformation of God, the question arises whether it is a part of God or the whole of God that is transformed. If it is the latter, then we have the lower pantheism which confuses God and the world. An evolving world will mean an evolving deity. If we say that it is a part of God that is transformed, then we will have to assume that God can be partitioned. What is the nature of the unrealized residuum and that which is realized? We cannot take half a fowl for cooking, leaving the other half for laying eggs. The most modest course for philosophers would be to admit a mystery at the center of things. Ko Veda . . . Kuta iyam visṛṣṭiḥ? Who knows whence this creation is born.[13] It is māyā, mystery. Let us hold fast both ends and not try to find out where the lines meet. The real is the supreme spirit; the actual multiplicity is rooted in the real. How, we do not know. It is a mystery which we cannot penetrate and a wise agnosticism is the only rational attitude. St. Augustine quotes as a merry joke the answer to the question what God was doing before he created Heaven and Earth: "He was preparing Hell for priers into mysteries." I commend it to the consideration of all seekers of Heaven.

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[1] Sarvakalpanāmūlatvāt . . . Na hi mṛgatṛṣṇikādayopi nirāspadā bhavanti. Śaṅkara on Bhagavad-gītā. XIII. 14.

[2] Saṅkara on Brahma Sūtra. II. 2. 29.

[3] Na vastuyādhatmyajñānam puruṣabuddhyapekṣam.

[4] Adhyāso nāma atāsmin tad buddhiḥ.

[5] Paśvādhibhiśća aviśeṣāt.

[6] Evam ayam anādyananto naisargiko mithyā pratyayarūpaḥ kartṛtvabhoktṛtvapravartakas sarvaloka pratyakṣaḥ.

[7] Śaṅkara on Brahma Sūtra. III. 2. 21.

[8] Na hi Khalvananyatvam iti abhedam brūmaḥ. Kiṁtu bhedam vyāsedhāma. Bhāmatī. Cf. also: Saṅgatabrahmavādinorayam viśeṣo yad ādimaḥ sarvasya mithyātvam brūte, dvitīyas tad ananyatām.

[9] Kalatrayasattāvan. Cf. also: Pratipannopādhan traikālikaniṣedhapratiyogitvam mithyātvam.

[10] Yat kṛtakam tad anityam; or: Loke yad arabdham tad anityam.

[11] Jñānaikanivartyatvam.

[12] Apāntāratanaḥ prabhritīnām vedapravartanādiṣu lokasthitihetuṣvadhikāreṣu niyuktānām adhikāra tantratvāt sthiteh . . . yathā asau bhagavan savita, sahasrayugaparyantām jagato 'dhikāram caritvā tad avasāne udayāstamayavarjitaḥ kaivalyam anubhavati. Śaṅkara on Brahma Sūtra. III. 3. 32.

[13] Ṛg Veda. X. 129. 607.

CZECH NATIONAL THINKING

FERDINAND PELIKAN
(*Prague*)

CZECH national character does not incline to theory. Religious and moral thinking was the chief concern of our ancestors. In this respect the names of Chelcicky, Huss, Komensky (Comenius), stand among the precursors of modern European culture. The beautiful Czech country became a center of the conflict of Roman Catholicism with German Protestantism, and this conflict continues to our days. The native character of religious and moral fanaticism in our race, united with its practical sense, did not allow our philosophical tradition to develop in the same degree as among other west-European nations, for this tradition was more than once interrupted. The practical side of science is emphasized also by our modern thinkers, who are more sociologists, educators, logicians, etc., than pure theorists. Our philosophy has always been in intimate connection with life and with national culture.

The mediaeval disputes are reflected in the works of *Thomas of Stitny* (1331–1401), who was a forerunner of *John Huss*, the historical personality most loved by the Czech people, whose name as a religious reformer is universally known. He was declared a heretic by the Council of Constance and burned on the 6th of July, 1415. He was also a great Czech writer and has a foremost place in the history of our language. His name as the "first Protestant" of Europe is forever written in human history.

A profound thinker, *Petrus Chelcicky*, was the precursor by four hundred years of Tolstoi's principle of non-resistance and one of the first heralds of peaceful tendencies in the world. Sworn enemy of the

Church of Rome (like all followers of Huss), he was also opposed to every worldly authority and creator of the idea of Christian negation of the state.

After the Hussite wars, a long pause in the Czech philosophical tradition began, which continued until the end of the seventeenth century, when there appeared in the scientific world the greatest writer of the community of Bohemian Brethren, *John Amos Comenius*, educator of world-wide fame. His *Labyrinth of the World* is available in English translation.

The loss of Czech independence at the defeat on the plateau known as the Bílá Hora (White Hill) interrupted our philosophical tradition for two hundred years. The Czech language itself came near to extinction.

Its "Revival" at the end of the eighteenth and beginning of the nineteenth century is the work of many national heralds who awakened the people from their cultural trance. The first duty was to create a new literary tradition. The first period of our Revival is, therefore, characterized by the names:

John Kollář (poet of the Daughter of Slavia),
Josef Dobrovský (grammatical works),
Pavel Šafařík (Slavonic antiquities), and
Josef Jungmann (translator of English poets).

Our political self-consciousness was awakened (in the second period of the Revival) by *Franz Palacký*, the greatest historian of our people, and a talented satirist and journalist, *Karel Havlíček*. The latter has expressed the common-sense spirit of our nation in most effective manner. His fate as victim of political persecution under the Hapsburg rule was typical of what was suffered by the people as a whole.

Palacký created the political program for a hundred years. His great work, *History of Bohemia*, grandly conceived, contains the first philosophy of Czech history. He starts from Schelling's principle of polarity and presupposes the eternal conflict between two races, German and Slav, a theory which was sanctioned in the World War. Palacký foresaw this war and from him comes also the theory of the future "world-centralization," a union of all European peoples. The thought of Palacký that the world is better constructed when it contains a plurality of peoples is an anticipation of the pluralism of individualities which was advocated by William James, whose credit for this standpoint cannot be forgotten. The world is more pleasant when composed of "many" rather than of "one." The Czech has many features in common with the Anglo-Saxon; especially, perhaps, in the fact that his resistance to the theory of *quand même* is his strongest trait in the struggle of life. He will theorize only for the reconstruction of praxis (Dewey) and is satisfied with what is needed for this reconstruction. An individual can give his whole life to theory, but for the human race it is only a stage in progress to better praxis.

DINNER GIVEN BY THE COMMONWEALTH OF MASSACHUSETTS

Copley Plaza Hotel, Boston
Friday, September 17, 1926, *at* 7.15 *o'clock*

Toastmaster: Hon. Wellington Wells, President of the Senate, Commonwealth of Massachusetts

Address of Welcome by Hon. Wellington Wells

Members of the Sixth International Congress of Philosophy, it is a distinguished pleasure for me, in behalf of His Excellency, Governor Fuller, to extend to you the greetings of our Commonwealth on this notable occasion. I know I voice the regret of all of us at Governor Fuller's enforced absence, and I express to you his regret that he cannot be here in person to welcome you to our capital city.

The Commonwealth of Massachusetts is greatly pleased and honored to extend welcome to this assemblage of savants from all parts of the world at this very notable gathering, and especially to those representatives from over the seas she extends her most hearty welcome. It is a hopeful sign and an auspicious augury for the future that in your councils and deliberations men from nations which were on opposite sides in the late World War have sat side by side in peaceful and friendly communication of thought. And may your meetings have served the double purpose of helping to heal the wounds of war and aiding in the reëstablishment of international good will and understanding, as well as in the furtherance of that branch of higher learning in which you are especially interested.

We trust that the recent admission of the Republic of Germany to the League of Nations is a hopeful sign for the future peace of the entire world. War is more often the result of the clashing of policies of various governments, or of the ambitions of rulers, than it is of the innate enmity and racial hostility of the individuals comprising the various nations. May such gatherings as yours, by the friendly intercourse here enjoyed, play their full part in helping to prevent international misunderstandings and differences in the future!

Massachusetts has a peculiar interest in the proceedings of such a Congress, for she recalls with justifiable pride the service of Ralph Waldo Emerson and William James to the cause of learning in general and to the study of philosophy in particular. We are proud of our many excellent educational institutions throughout our State and in this center of learning, and of the cultivation of the arts, and especially of Harvard, the great University across the Charles, the oldest in point of years in this country, but young and virile in intellectual strength, who has always given of her best to any cause, to any branch of learning or of science that would advance and improve the condition of mankind.

I cannot let this occasion go by without a word of reference to the passing of that great educator, that pioneer in its growth and development, Charles W. Eliot, President Emeritus of Harvard University. Though in physical form he has gone from us, his teachings and service to mental development will live with us as long as mankind appreciates the true value of education.

The Commonwealth of Massachusetts congratulates your members upon the success of your Congress, upon the unexpectedly large numbers in attendance, upon the fine spirit and public interest shown, and upon the high standard of excellence displayed in the many papers presented and in the discussions which followed them.

We rejoice that at this meeting after the interruption caused by the World War, your members have had an opportunity to visit our historic shrines so inseparably a part of the early history of our nation: Faneuil Hall, the "Cradle of Liberty," the Old South Church, the scene of Dr. Joseph Warren's patriotic utterances, the battle fields of Lexington, Concord, and Bunker Hill. May you take from these places to your respective countries the inspiration of the men who there fought and played their parts in those stirring events, and who made the whole world a better place for mankind by reason of the spirit of liberty that they displayed.

The Commonwealth of Massachusetts again congratulates you on the success of your meetings and hopes that an ever-increasing measure of usefulness and success will attend your future gatherings.

Many Europeans of great note in the field of letters, of science, and of art, have met here for the first time. You have heard many of them in your deliberations, and some of them we are privileged to hear tonight. I have the honor of presenting at this time Professor Surendranath Dasgupta, professor of philosophy, University of Calcutta, India, and specialist in Hindu philosophy.

Some of us were taught in our youth that at a certain stage in the history of the world the Wise Men came from the East. I am sure in this case you will agree that this order has not changed. I take great pleasure in introducing Professor Dasgupta.

Address of S. Dasgupta

Mr. President, ladies and gentlemen, I am not a public speaker, but still, after a hearty banquet, silence is impossible, even for a dumb-bell. This has been a very hearty meal, and I say it not only of this meal, but I regard this meal as symbolic of the larger meal upon which we have been feasting for the past five days. It began with chicken and waffles, and then proceeded to beefsteak, and then in turn to every luxury that the world provides. Now all that makes a very fine combination. Everything from the beginning to the end has been so well arranged and so pleasant that we could not consider that anything could have been better. Your advance workers and committee have been working all day, and every day of the week, and I have no idea to what trouble we have put you by coming here in such large numbers, and all of us demanding various kinds of things and various kinds of help from you. But I am glad to say that we have always found every particle of comfort, and nobody could have done better than you.

Speaking for myself, when I landed at New York I found some of your instructors there, and some students, and I was well cared for. Then I was taken in the car of one gentlemen which went at so great a speed that I thought there might be an accident. And yet, ladies and gentlemen, there have been no accidents here, there have been no mishaps on either side, and we are in very good humor. So here we have been discussing philosophy, and meeting other philosophers, exchanging how-do-you-do's, and glances and friendly looks, and also friendly conversation and discussion, so that I feel very much at home here in this strange land, which is just the antipodes from India. I am only seven days old in America, but I have found everything delightful here.

There is a word that I would like to say: from the beginning of the International Congresses in the first four sittings, India had no place in the Congress at all. Nobody thought of India, that such a land ever existed, or that there was any philosophy in India at all. But my investigations show that in India there is and has been an interest in philosophy at all times, and I can say safely that India has devoted itself to thought; but the bulk of European thinkers did not know much of India's philosophy. It was our misfortune that you did not know us or anything about us.

It was at Naples that India was first invited, and I still remember the warmth with which we were received there. I see some of my kind friends from Naples here at this Congress. On this occasion two of us have come, and I know that with this enthusiasm we shall love our philosophy better and shall return to India with the hope that India may profit and that we all may profit from our mutual exchange of thought.

I have always felt, and in India I must always feel, from the traditions of our religion and universal compassion and the principle of the union of hearts, that nothing could do so much to alleviate mankind as the meeting of the great men and the great thinkers of the different countries; because then people begin to perceive each other and to have more respect for one another. I think my time has expired. I have nothing more to say than to thank you again for the comforts and civilities that we have received and for the opportunities that you have given us for taking this long journey to your country. We bring to you our messages from the remotest banks of the Ganges and the valley of the Mulla, with our heartfelt unity in the bonds of thought.

Toastmaster Wells. Your admirable committee on arrangements has provided a rather lengthy and most attractive program, and I shall restrain the natural tendency of a toastmaster to make a speech before each of the formal speakers. Nevertheless I must say that it gives me very great pleasure to present the next speaker, Professor Hans Driesch, professor of philosophy, Leipzig, Germany, a distinguished biologist, vitalist, and metaphysician.

Address of Hans Driesch

Mr. President, ladies and gentlemen, before I begin with my proper speech I have to make two semi-official announcements to you. My colleague from Munich has brought the greetings of the Kant-Gesellschaft and expressed them in the session of this afternoon, but I have been asked to repeat them to you because many of you were not then present, and I have been asked by the president of our Academy to present to you the greetings of this old and great institution founded about 1700. This is an Academy which consists of men of science, always in contact with other people, and for this reason the president of the Academy has asked me to offer the greetings of my country.

We are all sorry to leave this gathering, and of course we recognize that there must be something else to do for these kind people who have arranged this Congress. They are happy, I am sure, that we came, but I think they will say, Oh, it is all right now to let them go, and this now brings me to my proper speech, ladies and gentlemen. I think all of us have two very strong feelings in our hearts, and the first is the feeling of thanks, of very cordial and sincere thanks to all those who have been engaged in the making of arrangements for this wonderful Congress. We thank the representative of the Governor of the Commonwealth of Massachusetts who has arranged this very bountiful feast for us.

We thank President Lowell who opened the doors of his wonderful University to us with the greatest cordiality.

We thank Dr. Armstrong, and Dr. Woods, and Dr. Perry, and Dr. Coss who have endeavored to arrange this Congress in such a beautiful way, and let us not forget the great number of young men of the University, the graduate students, who have taken care of us so well and arranged everything so comfortably.

Now I come to the second feeling that is in our hearts, as I am convinced. This is an experience of my own. Whoever has traveled on a French steamer, as I have done on several occasions, will know that on the completion of the passage we are as one family. Now, I think we are, I might say, *la famille philosophique*. But we are not in the same condition as the family in the ship. They live together and perhaps die together, but we have only to live together. And we have lived together in a happy way at Harvard College, such as I shall never forget.

You know that last week there was a great event in the history of my country, as the preceding speaker has said. We are now a member of the League of Nations. So that we are not only a family of philosophers, but, in our capacity as citizens of the world, we represent a league of nations for ourselves. And here I have my own personal experience with the league of nations of intellectual people. I have been in Prague, and in China, and in Japan, I have visited almost all the nations of the world, and I have always been received with the greatest cordiality and the greatest understanding and consideration and mutual friendship, so that this sensation which we experience here is nothing new to me. But what is new to me is that such a great company as we are here, of 500 people, should all agree upon this one matter. One thought covers it all. Think of the session of last evening! It was a real demonstration for peace. Professor Becher from Munich and the representative from France, Professor Bouglé, as well as representatives of other countries who participated, all said the same thing: We must make the conciliation, we must make the understanding, we must make the friendship international in its character; that is what we need and that is what we shall have.

We are now, in a way, the United States of Europe; of course not as opposed to the United States of America, and some future United States of Asia, but I am quite sure the end of it will be — I shall not live in that time for I shall not last so very long — that it will be the United States, not of America and not of Europe or Asia, but the United States of all the world.

It is a sort of new nationalism, as I should like to call it. That is not a very popular title now. But you all think of the old nationalism which was purely mechanistic. But the proper nationalism rests on the reality of modern feeling, and it is not something which regards only the mere aspects, but it is a part of reality.

There are people of very many nations, I think a dozen nations, all carrying good will to us, and I am quite sure that nobody leaves this beautiful city without the feeling that mutual understanding, friendship, and conciliation have been strengthened by this meeting. And let me close my speech with that single thought.

Toastmaster WELLS. Perhaps I might say for the information of the members that according to the figures furnished to me there are representatives of sixteen other countries, besides those of the United States of America, present at this Congress. I think it is a wonderful showing in these days and under the present conditions.

The next speaker whom I have the honor to present is Professor Federigo Enriques, one of the delegates from Italy, representing the University of Rome, professor of higher geometry, mathematician, and student of the philosophy of science.

ADDRESS OF F. ENRIQUES

Mr. President, ladies and gentlemen, in the name of the Italian students of philosophy, whom I have the honor of representing, it is my privilege cordially to respond to the greetings of the Commonwealth of Massachusetts, and the great Republic of which it is a part. The Congress in which we have participated has impressed us especially as a wonderful expression of the spirit of this great country, which is giving the world a new civilization, and has proved that a development of industrial and commercial life does not exclude a profound interest in those problems which are the pride and the torment of human reason.

This interest has dictated the cordial, impartial reception which you have here extended to the representatives of every nation and of every form of thought. The American spirit is open to the sympathetic understanding of every sincere intellectual and moral effort. This attitude of the American mind and of the American heart reveals to us not only the extraordinary good will and generosity of your great people, but their deep sense of that human solidarity which our Congresses intend to develop and foster, by promoting the reciprocal acquaintance and understanding of students of philosophy belonging to different nations and with the most heterogeneous tendencies. And I believe that this work of ours, and the spirit which animates it, not by denying, but by subordinating individual and national differences, may one day become an efficient factor in the future peace of the world.

I am particularly touched by the cordial feeling toward my country prevailing among the members of this Congress, and generally in this country. In the Renaissance, Italy, the ancient mother of Law, laid the foundations of the Art and Science of today, and, by freeing thought from the shackles of mediaeval scholasticism, opened the path of modern civilization. And so, after all, it was possible to believe that, through this creative effort, she had exhausted her strength and had become unable to continue her historical past. The Risorgimento, however, was a new expression of her moral power; she overcame obstacles which had seemed unconquerable. and she rose again as a compact national being. Today, after the ordeal of the War, her renewed energy is showing the most encouraging promises. Through the spirit that animates her reconstructive activity, through the universal aspiration which pervades her, the new Italy, in which the past is felt as an obligation for the present, turns her heart toward America, with the persuasion that in the near future a more intimate understanding between our two countries will work as an essential element for the progress of mankind.

Toastmaster WELLS. One of the results of the great conflict waged some years ago was the creation in the twentieth century of new countries, new under their present form of government but old in tradition and old in learning. The next speaker whom I have the honor to present is one of the leaders in thought of one of those new countries, of Poland; he is the official delegate of the University of Poland and of the Polish Government, professor of logic and the methodology of the sciences, at Posen, Poland. I have great pleasure in presenting Professor W. M. Kozlowski.

Address of W. M. Kozlowski

Mr. President, ladies and gentlemen, this banquet requires me to recall an occasion 150 years ago, a date revered in America, as the beginning of the era of her independence. In that year, Kosciuszko was admitted to the American service. One year later, a Knight of Freedom, as he is popularly called, Count Casimir Pulaski, landed in this very city of Boston, to assert his belief in freedom and to give his life for America's independence.

Many years afterward Kosciuszko began his struggle for freedom "on a larger theater," as it appears in one of the letters of Washington. This was the struggle for the freedom of his fatherland. It seemed that the time had come when Kosciuszko was to realize his boyhood dream of taking the position of a hero. The hero of his boyhood was Timoleon, the Greek, who had fought for the freedom of his own land, his own city, and other cities, and who when victorious refused the honors which were proposed for him in order to become a private citizen.

That was the dream of Kosciuszko, in 1794, when there seemed to be some hope that his dream would become a reality in his land. But the struggle was not successful. After two years of prison Kosciuszko returned to America to seek a small, private home on the soil of liberty and of freedom. His hopes were suddenly revived by the invitation of the French Directory to take the command of the Polish Legion then in France, to fight with them. But his hopes were soon extinguished. Bonaparte's *coup d'état* left no place for delusions. And sorrowful were the last years of the hero. How different would they have been had he been able to bring about what has happened in recent history.

The blood of Kosciuszko and Pulaski, shed on the American battle fields, has created a sacred tie between Poland and America, strengthened by years of peaceful association. Kosciuszko was the associate and co-laborer of Washington. His noble but modest figure was magnified by the perspective of elapsed years to the size of a giant, patronized by both countries. Ever since, through the generations, the Poles have been coming to this country to give their heart and honest labor, and to take in exchange freedom and strength. Meantime the thirteen colonies have grown to mighty power. And the courage of Kosciuszko and Pulaski, their devotion ot the Colonies, is now returned to Poland as a splendid gift, — aid gni aining her independence.

This gift was accompanied by another, that of the peaceful confederation of peoples. The great idea of George of Podebrad, king of Bohemia, in the fifteenth century, of Henry IV of France in the sixteenth century, has become a reality. America has brought new light to the old world. After having astonished it by the splendor and the rapidity of her progress, she now shares the benefit of the new international order, the agreement of the nations. From this you will see how much we admire America, and how thankful we feel to America.

Toastmaster WELLS. Oftentimes the good that a man does is not sufficiently appreciated by his contemporaries, until after he has departed from this world. It is therefore refreshing, and an action of which I know you will all approve, that in the case of the next speaker his contemporaries have seen fit to honor him during his lifetime. He is one of the delegates from France, professor of philosophy, Sorbonne, Paris, member of the Institute of France, Chevalier of the Legion of Honor, and authority on the mind of primitive man. I take great pleasure in introducing Professor Lucien Lévy-Bruhl.

ADDRESS OF L. LÉVY-BRUHL

Mr. President, ladies and gentlemen, allow me to reiterate what Professor Dasgupta has so well said about our entertainment here. We feel exceedingly grateful to the Commonwealth of Massachusetts and to Harvard University, which have done so much and have been so kind to us, and especially to the President of Harvard College, Mr. Lowell, and to Mr. Armstrong, and the professors in the Department of Philosophy; and also to the young men who have been so kind and so amiable in caring for our material wants during these five days. It will be a very happy recollection for us.

Now I will not detain you long, but I think I must give you the impression of this Congress that I am taking with me. I hope I may be able to express my feeling, but I fear I shall not. I think that the Congress has been in a new sense an awakening of fellowship, of friendship, and of affection. I have been attending Congresses since before the War, and I remember very well the different nations which were there, that they were very polite to one another, but still it was a cordiality not going very far and not very deep. And every nation kept a little aloof from other nations, because very often it is true that the people of the same language keep together in such a gathering. But in this gathering in this country, it seems to me that it has been somewhat different, and that we have met many people of different nations, of different language, who perhaps five years ago would not have dared to address one another, but there has come the time now when they are seeking one another, each trying to see if one has the same feeling that is in the heart of the other.

This has given rise sometimes to a rather ludicrous consequence. Originally, when a topic was assigned and a paper presented by someone, then we all said, Yes, we are agreed. Still, we all heard after the meeting, and we all knew, that they did not agree. Now what would be the result if they agreed? So it is a matter of a peculiar condition. I am not quite sure that there was so much agreement, but the meaning of it is, — We want to agree, we want to feel that we are not apart on national or political questions.

So the Congress has been international because the nations wanted really to meet, and I am happy to say that between all those unfriendly nations America has been the link, the generous and kind link, to all. So we can say that in this country we have found a common meeting ground, on which we have come together to a degree which has not characterized any of the Congresses that have taken place before. This is the first one in which this feeling of international friendship has been so dominant and so prevalent, and as we go away we feel that we must meet again, that we will be in the same disposition, and that much of what has taken place might not have transpired had it not been for this sort of contact. But in the future I feel confident nations will be on a satisfactory basis and then we will all feel that we have gained a great victory for everyone.

Toastmaster WELLS. As I said in my first introduction, over 1900 years ago the Wise Men came from the East; and the next speaker is proof that in the twentieth century some of the wise men come from the West. In this case a graduate of the University of Nebraska has come to the oldest university in the country, there to fill one of the highest and most honorable positions in her gift. I take great pleasure in presenting to you Dean Roscoe Pound of the Harvard Law School, who here represents Harvard University.

ADDRESS OF R. POUND

Mr. President, ladies and gentlemen, I cannot pretend to speak to you as a philosopher. I am not even ex officio a philosopher. I am neither a burgher nor a freeholder in the City of Philosophy. I suppose, as a lawyer, I might say that I have an undivided one-third interest in an outlying field, but I suppose that even with respect to that small interest the title is in grave dispute. And so, perhaps, in your City of Philosophy, I am, as you might say, a stranger who is permitted to sojourn there for the purpose of his business so long as he conducts himself in an orderly manner. And yet, perhaps, just because of that I might be able to speak with more assurance as to what this Congress has meant to Harvard, and, if the presiding officer will permit me to trespass upon his domain, to the Commonwealth of Massachusetts, and to every American citizen, who is ex officio a king, I will undertake to say, in these United States.

I suppose neighborhood gossip spread about the rumor that the father of philosophy was an eccentric old man who was so absorbed in gazing at the stars that he fell into a well. And in the same way, certainly, the last generation in this country regarded the philosopher as a harmless old fogy who spent his time in abstruse discussions, in words hardly understood (we were a little doubtful whether he understood them himself), about subjects which were of purely abstract and theoretical importance.

That attitude of the last generation in this part of the world toward the philosopher was a perfectly natural result of the enforced versatility and the enforced self-confidence of the pioneer. He had to be adequate to everything; he had to be equal to everything. The average man who had to build his own house was a pioneer. There was no division of labor to help him with machinery, and if he had any machinery he had principally to make it. He had to guard his own household. There was no governmental paternalism, or should I have said maternalism? to perform these things for him. He had to be versatile or go back ignominiously to the Old World; or if he was in my part of the world, to go back ignominiously to the East.

That compelled him to be self-reliant and versatile, and he did not have much respect for those who were simply thinking and were not out in the wilderness with the axe, hewing and cutting. It is therefore a very significant thing, this respect with which the laity are treating this Congress. It is a very significant thing that a Congress of Philosophers comes to an American city, and, if I may say so without the slightest irreverence, finds the laity saying, "Hosanna in the Highest, blessed be he who cometh in the name of Philosophy."

And I suspect there is a good reason for it, and that good reason may indicate to you what your coming from every part of the world to this Congress means, not merely to American universities, not merely to this University, but to this Commonwealth and the country as a whole.

We are very much troubled in this country just now about the dilemma of unification and centralization. There is a great economic unification. How to maintain and preserve this seemingly inevitable unification without political centralization, which is abhorrent to our political instincts and which we suspect with good reason might be highly dangerous to our freedom, is a very grave problem which we shall not be able to solve either by opposition to unification or by resolution against centralization or federal government interference. And I suppose that behind that is a philosophical problem which your coming among us just at the time that this philosophical problem takes on such a practical import, makes you doubly welcome. It was not such a long time ago that the public thought of the man of pure science in the same way. A man of pure science was an interesting crank, an interesting eccentric, who spent his time with weeds or bugs or noxious smells, or played with a microscope or a retort, and was not of much importance in the world. And yet, we have come to realize today in medicine, in surgery, and the technical arts, and even in agriculture, that what we do depends on the accomplishments of the men of pure science. And when we are confronted in this Commonwealth with a serious problem of making our pioneer devices for criminal justice serve the purpose of the urban industrial society of today, when we are confronted with the necessity of overhauling our pioneer institutions and criminal law, when we have problems in relation to our laws and administration, problems of how to adjust our eighteenth century bills of rights with their extravagant securing of individual rights and the need for general security in the crowded city of today, — with all those practical problems before us and some of them very acute, we cannot but recognize that there, too, the man of pure science must be called on to help us. For the problems which confront us as practical problems of social government are at bottom the problems which you are thinking about and you have been debating and arguing, all over the world. And your coming to us just at this time renews our faith that, as in the eighteenth century philosophy enabled us to adapt the institutions of the Old World so as to make them effective institutions for America, so tomorrow's philosophy will enable us to adapt the institutions of the nineteenth century to America and the needs of the urban industrial society of this time.

Toastmaster Wells. The founder of the University across the Charles River, on the staff of which is our last speaker, owes much of his character and characteristics to the environment of the place of his birth. It is therefore to my mind extremely fitting that you have chosen as your next place of meeting the country on the other side of the Atlantic from which John Harvard came, and that you have chosen to preside over that next International Congress one of the foremost men of letters in one of the great universities of that country which has been an example to our universities here. I take great pleasure in presenting at this time Professor J. A. Smith, professor of mental and metaphysical philosophy, Oxford University, Oxford, England, foremost authority on Aristotle and senior editor of the Oxford University edition of his work.

Address of J. A. Smith

Mr. President, ladies and gentlemen, I am deeply sensible of the honor of being deputed by my colleagues to express to you the cordial gratitude of the English delegation to the International Congress of Philosophy; for the warm and generous welcome which has been extended to them from the first moment that they appeared in your midst, and for all the friendly and devoted attention which has surrounded us ever since; for all that has made and is making our brief sojourn among you one of delight as well as one of intellectual stimulus.

We had heard that among the nations of the world America was distinguished by a genius for hospitality, and what we learned from reports we have now verified in personal experience and enjoyment. We have come from home to home, and we bear back with us a memory and a message which we shall carry to our several and often widely divided places of residence; a memory and a message of reciprocated good will, linking us in bonds of affection and gratitude, across what we now know to be called the East Atlantic seas.

For this we are especially indebted in the first place to our American colleagues on the Organizing Committee of the Congress. But I am glad to add my tribute to what has been said by my predecessors by way of gratitude to the students who have abounded in unfailing services to us. And here and now I desire to express to you, to acknowledge the culmination of their efforts in this reception of us, sir, by your illustrious and well beloved Commonwealth, the record of whose services to and sacrifices for liberty form a part of the public patrimony of civilized mankind.

There are many, all too many, interests which divide man from man, and state from state, and people from people. And the counterforces that work for unity may seem at times too weak to triumph over these destructive forces.

Philosophy has rather a bad name as the parent of dissension and controversy. And indeed it is typical perhaps not to think much or deeply for oneself without thinking differently from others who are engaged in a serious and responsible task. But perhaps to a superficial auditor of our discussions at this Congress it might seem that we were engaged in the multiplication of perhaps meaningless diversities of opinion. But, believe me, to those who have been partakers in this debate, the very reverse has been the case. We have experienced a glowing approximation of unity, and an essential unanimity.

In another way philosophy has rather a bad name. It is generally believed that in its relation to the nations of the world it has maintained in its victories a spirit of disillusionment and disintegration; and from our experiences here and our cordial meetings, we have found it to be so far from the case as to be the very reverse. At any rate, we part from one another with a greater hopefulness for the future of philosophy, and especially a greater confidence and hopefulness for the future of the New World, in which some of us have made our first personal acquaintances, because of its magnificence, because of the great treasures which are afforded at Harvard, and because of the great army of youth that here and now are entering upon this great field. We admire the zeal with which the resources of wealth all over these States have flooded the channels which feed the life of the educational system, and we confidently expect that from them will come an enrichment not only of your own national life, but, as I firmly believe, of the whole culture of the civilized world, by which each and all of us, however separated by space and time, can profit.

In this we are deeply concerned, not only as good citizens of the world and good neighbors of one another, but in the interests of ourselves, so long as life and energy are vouchsafed to us and the generations which are to follow us hereafter. The pursuit and protection of truth, which we are pledged to make the aim of our lives, does not divide, does not deprave, does not unman and enfeeble us, even, for the tasks of life. It rather unites, accelerates, and invigorates. Of all this we have had convincing and delightful testimony during the meetings of this Congress. But in these wonderful effects, even philosophy would not have availed to this end had its work not been surrounded, as it has been here, by a widely diffused and steadily maintained spirit, and quickening atmosphere of fellowship, coöperation, mutual respect, kindliness, and good will. In this you have set us an example and shown us well. We hope that in the contemplated return visit of this Congress to Great Britain we shall show you that we have not forgotten the lesson.

In the meantime, in behalf of my British colleagues, I offer you again the assurance of our unanimous and profound gratitude for the magnificence and the munificence of the great reception which you have accorded to us. It has quickened the sense of unity in all that is best and highest in the interests of mankind, and strengthened us in our resolve to preserve and extend that unity to the best of our several and conjoint abilities. On such accord, on such coöperation and collaboration, hang all our hopes for the future of our common work.

Toastmaster WELLS. The success of any organization depends not so much upon the purposes for which it is organized as upon the caliber of the men who are entrusted with the conduct of its affairs. The success attendant upon this Congress shows how fortunate you have been in the selection of your officials, and it gives me great pleasure to present as the last speaker Professor William P. Montague, vice-chairman of the Organizing Committee of the Congress, and professor of philosophy in Columbia University, that great university in our neighboring state of New York.

ADDRESS OF W. P. MONTAGUE

Mr. President, ladies and gentlemen, I wish that I could make a proper speech, graceful and gay, befitting the occasion, but I lack the wit, and so I shall do a rather dreadful thing, after so many papers on philosophy, — I am going to read a paper on philosophy. It is a very little paper, and I appeal to your kind hearts and good nature to withstand the ordeal. My theme is "The Vision of Philosophy."

At the opening of our Congress we were reminded that a great novelist had characterized our academic philosophies as artificial and remote from the life and needs of today. And now at this our final gathering, and in the light of the proceedings of the past week, it would seem natural to consider again the charge brought against us by Mr. H. G. Wells. I propose then to set forth what is, I think, the great answer to the question of the use or uselessness of philosophy.

The question itself is as old as Thrasymachos, and the answer that satisfies me is the answer of Plato. Philosophy is a vision as religion is a faith. The faith of religion is that values are immortal in the realm of existence. The vision of philosophy is of values that are eternal in the life of the spirit. This, I believe, is the Platonic revelation. The forms of religion are many, but through all that are in anywise significant there runs the ancient and pathetic hope that existence is in reality better than it appears in our experience. And through the even more numerous forms of philosophy there is present in one sense or another the vision of a realm of values whose validity is independent of whether they are realized in existence or not. But while independent of the changes of history these Platonic ideals are the unmoved movers of whatever of goodness or beauty a history may achieve.

Existing situations do, of course, determine which values are relevant to their time and place, but success or failure in realizing the appropriate ideal neither creates nor destroys the validity of that ideal.

Of what use to the world is this Platonic theory of values? — a theory that is implicit in every genuine philosophy from the most *right* of the idealisms to the most *left* of the pragmatisms. Its use, as I see it, is to prevent man from committing the sin against his own spirit, the unforgivable sin of subordinating the ideal to the real and accepting whatever is as therefore right.

The religious hypothesis that the world at heart is somehow good, has had and will have great fluctuations in its probable truth. In some ages the body of natural knowledge seems to indicate its almost certain truth; in others the reverse. The vision of philosophy is not poignant, sweet, and consoling, as is the faith of religion. It is thin, cool, and steadfast, like the light from the stars. But the eternity of values is certain, while their existential immortality can never be more than probable.

In all our lands today the spirit of Thrasymachos is rife. Discouraged at the failure to realize our ideals there are those who deny that there *are* any ideals *to* realize. And we are proffered the old and shameful doctrine that conscience should bow down to the forces of Nature and to those of government either "red" or "white." Philosophy and the spirit of philosophy are then profoundly relevant to the present scene, for at no time have the peoples of the earth been so in danger of losing that vision without which they perish — the Platonic vision of an eternal good, multiple in its aspects and applications, but single in its validity, subsisting quietly through all the vicissitudes of existence.

Toastmaster Wells. This concludes the official part of the proceedings; and may I in behalf of our Commonwealth, in bidding you God speed and au revoir, express the hope that at no distant time in the future you will see fit to hold your deliberations in our midst, and to assure you in that case of a most hearty welcome.

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